Scientific Excellence • Resource Protection & Conservation • Benefits for Canadians
Excellence scientifique • Protection et conservation des ressources • Bénéfices aux Canadiens

A Review of the Babine River Counting Fence Biological Program 1989

M.J. Jakubowski

Department of Fisheries and Oceans
Prince Rupert, British Columbia
V8J 1G8

March 1990

Canadian Data Report of
Fisheries and Aquatic Sciences
No. 788

Fisheries and Oceans Pêches et Océans
Canada

Canadian Data Report of Fisheries and Aquatic Sciences

Data reports provide a medium for filing and archiving data compilations where little or no analysis is included. Such compilations commonly will have been prepared in support of other journal publications or reports. The subject matter of data reports reflects the broad interests and policies of the Department of Fisheries and Oceans, namely, fisheries and aquatic sciences.

Data reports are not intended for general distribution and the contents must not be referred to in other publications without prior written authorization from the issuing establishment. The correct citation appears above the abstract of each report. Data reports are abstracted in *Aquatic Sciences and Fisheries Abstracts* and indexed in the Department's annual index to scientific and technical publications.

Numbers 1–25 in this series were issued as Fisheries and Marine Service Data Records. Numbers 26–160 were issued as Department of Fisheries and the Environment, Fisheries and Marine Service Data Reports. The current series name was introduced with the publication of report number 161.

Data reports are produced regionally but are numbered nationally. Requests for individual reports will be filled by the issuing establishment listed on the front cover and title page. Out-of-stock reports will be supplied for a fee by commercial agents.

Rapport statistique canadien des sciences halieutiques et aquatiques

Les rapports statistiques servent à classer et à archiver les compilations de données pour lesquelles il y a peu ou point d'analyse. Ces compilations auront d'ordinaire été préparées à l'appui d'autres publications ou rapports. Les sujets des rapports statistiques reflètent la vaste gamme des intérêts et des politiques du ministère des Pêches et des Océans, c'est-à-dire les sciences halieutiques et aquatiques.

Les rapports statistiques ne sont pas destinés à une vaste distribution et leur contenu ne doit pas être mentionné dans une publication sans autorisation écrite préalable de l'établissement auteur. Le titre exact paraît au-dessus du résumé de chaque rapport. Les rapports statistiques sont résumés dans la revue *Résumés des sciences aquatiques et halieutiques*, et ils sont classés dans l'index annuel des publications scientifiques et techniques du Ministère.

Les numéros 1 à 25 de cette série ont été publiés à titre de relevés statistiques, Services des pêches et de la mer. Les numéros 26 à 160 ont été publiés à titre de rapports statistiques du Service des pêches et de la mer, ministère des Pêches et de l'Environnement. Le nom actuel de la série a été établi lors de la parution du numéro 161.

Les rapports statistiques sont produits à l'échelon régional, mais numérotés à l'échelon national. Les demandes de rapports seront satisfaites par l'établissement auteur dont le nom figure sur la couverture et la page du titre. Les rapports épuisés seront fournis contre rétribution par des agents commerciaux.

Canadian Data Report of Fisheries and Aquatic Sciences No. 788

March 1990

A REVIEW OF THE BABINE RIVER COUNTING FENCE BIOLOGICAL PROGRAM 1989

by

M.J. Jakubowski

Department of Fisheries and Oceans

Prince Rupert, British Columbia

V8J 1G8

91-01860/

TABLE OF CONTENTS

Page

Abstract/Resume iii

Introduction 1

Methods 1

Sampling Procedures.....2

Results 3

Acknowledgements 3

Babine River Water Levels 1989.....6

Sockeye enumeration figures for 1989.....7

Chinook enumeration figures for 1989.....11

Pink and Steelhead counts for 1989.....13

Coho counts for 1989.....15

Sampling information for 1989 Sockeye.....22

Sampling information for 1989 Chinook.....46

Sampling information for 1989 Pink.....51

Sampling information for 1989 adipose clipped Coho.....68

ABSTRACT

Jakubowski, M.J., 1990. Review of the Babine River Counting Fence biological program for 1989. Can. Data Rep. Fish. Aquat. Sci. 788: iii + 69p.

This data report contains daily fence counts for, Sockeye, Chinook, Pink, and Coho salmon (Oncorhynchus) as well as Steelhead trout (Oncorhynchus mykiss). Length, sex and where avalible age information for Sockeye, Pink, Chinook and Coho are presented as well.

In 1989, 1,255,027 large Sockeye, 122,711 jack Sockeye, 1983 large Chinook, 149 jack Chinook, 340,075 Pink, 5,228 Coho and 21 Steelhead were enumerated through the counting fence. Population estimates for Sockeye on the upper and lower Babine River are included as well.

RESUME

Jakubowski, M.J., 1990. Review of the Babine River Counting Fence biological program for 1989. Can. Data Rep. Fish. Aquat. Sci. 788: iii + 69p.

Le present rapport de donnees porte sur les denombrements quotidiens de saumons rouge, quinnat, rose et coho (Oncorhynchus) et de truite arc-en-ciel anadrome (Oncorhynchus mykiss) retenus au barrage de denombrement de la riviere Babine. Des donnees sur la longueur, le sexe et l'age (si disponibles) des saumons sont aussi incluses.

En 1989, on a denombre 1 255 027 gros saumons rouges, 122 711 jeunes saumons rougrs males precoces, 1 983 gros saumons quinnats, 149 jeunes saumons quinnats males precoces, 340 075 saumons roses, 5 228 saumons cohos et 21 truites arc-en-ciel anadromes ace barrage de denombrement. Des estimations des effectifs de saumon rouge dans les bassins superieur et inferieur de la Babine sont aussi presentes.

INTRODUCTION:

The Babine River salmon counting fence is located one kilometre downstream of Nilkitkwa Lake, 360 kilometres from the commercial fishing boundary at the mouth of the Skeena River (See figures 1 and 2). The counting fence on site was established in 1946 and is used to provide an accurate escapement count of sockeye and other species of salmon entering Babine Lake, where in excess of 90% of the Skeena River sockeye are produced.

METHODS:

The counting fence is normally installed in early July depending on water levels in the Babine River. In 1989 the fence was installed on July 4. Installing the fence entails positioning 66, 4 by 7 foot aluminum panels in their respective places along the 330 foot frame that spans the entire width of the Babine River.Seven holding traps, approximatly 6 feet wide by 8.5 feet long are spaced across the river on the upstream side of the frame. After all panels are in place, each of the seven traps are made operational by positioning sliding doors and counting chutes.

All species of Salmonids are present in the Babine River with Sockeye being the most numerous. Large numbers of Pink salmon are also present and spawn directly above the counting fence. When post spawning mortalities occur, the fence soon becomes littered with their carcasses which are subsequently pitched over the fence. The fence is opened to allow fish through from 0600 to 2200 hrs daily and counting between these times is performed in a series of two hour shifts by two, three and sometimes (depending on the strength of that day's run) four persons. When members of the crew are not counting, they are carrying out maintenance duties or sampling that days migration. At the end of the salmon migration, the aluminum panels are removed and the camp closed down. This occurred on October 20 in 1989.

SAMPLING:

Every day of the migration 25 Sockeye are randomly removed from the traps for the purpose of sampling. The procedure consists of sampling for sex, nose fork and hypural lengths and scales. Every fifth day 100 or 150 Sockeye are sampled for sex and nose fork length. These samples are used to determine the general age, size and sex make-up of that year's migration, therefore enabling potential egg depostion to be estimated. Chinook salmon are sampled after spawning as they are removed from the fence during that days deadpitch. All Chinook,with the scarce exception of those that are badly decomposed are sampled for scales, sex, nose fork and hypural lengths, origin (hatchery or wild stock by adipose fin) and in the case of females, egg retention. Pink salmon are sampled for sex and nose fork length. As is the case with Chinooks, Pink salmon are easily recovered from the fence during that days deadpitch and it is at this time that the 100 daily samples are obtained. An effort was made to stop and sample each Coho with a missing adipose fin for scales, lengths and sex.

TAGGING PROGRAM:

In the fall of each year a Pederson disc tagging program is conducted to determine the Sockeye spawning escapement in the upper and lower sections of the Babine River. A crew is assembled and using a jet boat and beach seine net, a number of Sockeye are tagged. After a few weeks to allow for distribution and spawning of the tagged fish a deadpitch/recovery program is started to determine the percentage of tagged to untagged fish therefore providing the basis for population estimates on the upper and lower Babine River. Calculations are made using the following formula;

$$P = \frac{M \times C}{R}$$

Where P represents the population of fish, M is the number of marks applied, C is the total number of fish examined for marks and R is the number of marks recovered.

JACK FISHERY:

If enough jack Sockeye are present in the salmon migration a jack fishery is conducted by the natives from Fort Babine through a contractual arrangement with the Department of Fisheries and Oceans. In 1989, a total of 51,941 jack Sockeye were harvested in the period from August 2 through September 8, a total of 38 days. Generally this fishery consists of persons dipping jacks from each of the seven traps and depositing them in buckets. At intervals, another person collects the buckets and transfers the fish to a large tub and eventually to a refrigerator truck on site where the fish are iced down and made ready for market.

RESULTS:

In 1989 there were 1,132,316 large Sockeye and 122,711 jack Sockeye counted through the Babine Fence. Daily counts of both large and jack Sockeye as well as the daily harvest of jack Sockeye are shown in Table 1. Graphs depicting the daily migration of large and jack Sockeye are presented in Figure 4.

During the Chinook migration, 1,983 large and 149 jack Chinook were enumerated. Daily counts and graphs showing the daily migration are presented in Table 2 and Figure 5 respectivly.

Pink salmon counts totaled 340,075 in 1989. Daily counts of Pink salmon are shown in Table 3. A graph of the daily migration of Pinks is presented in Figure 6.

A total of 5,228 Coho salmon were enumerated as they passed through the counting stations, including 168 adipose clipped Coho. Table 4 shows the migration pattern for clipped and unclipped fish. Figure 7 presents a graph showing the daily escapement of Coho for 1989. During the 1989 season a total of 21 Steelhead passed through the counting fence; daily counts for Steelhead are shown in Table 3.

Population estimates through a tag/recovery program indicate that in 1989 100,000 Sockeye spawned in the upper Babine River while only 5,000 were present in the lower Babine River.

Daily biological information from the Babine River Fence is avalible for Sockeye in Table 5, Chinook in Table 6, Pink in Table 7 and adipose fin clipped Coho in Table 8.

Water level measurements taken at the Babine River Counting Fence in 1989 are shown in Figure 3.

ACKNOWLEDGEMENTS:

The author would like to thank L. Jantz, B.Lapp and D. Southgate for their help in the final preperation of this report.

Figure 1: Location of the Babine River and Lake in the Skeena River drainage.

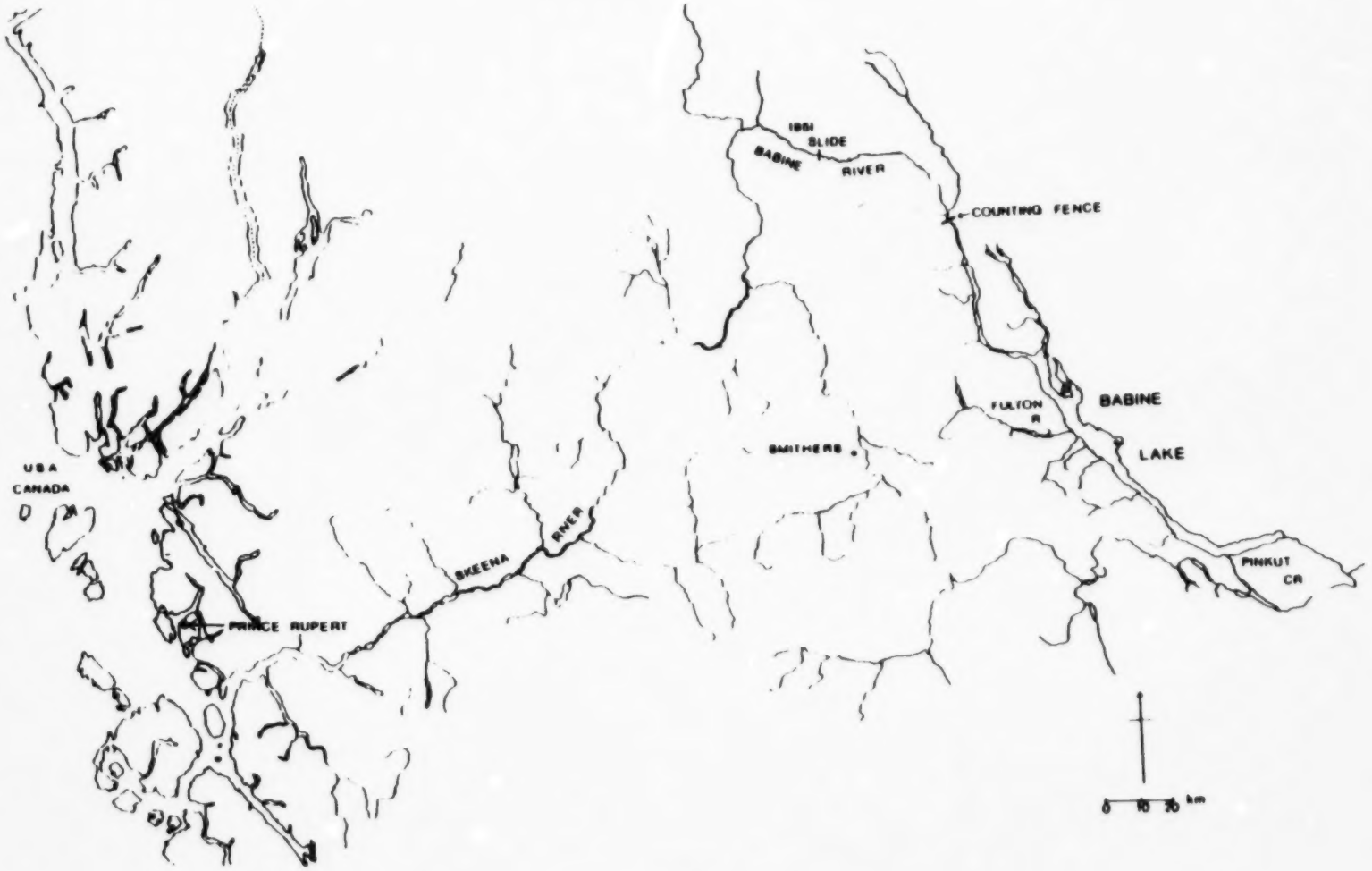

Figure 2: Location of the Babine River Counting Fence in relationship to Babine Lake.

Figure 3: Babine River Water Levels, 1989.

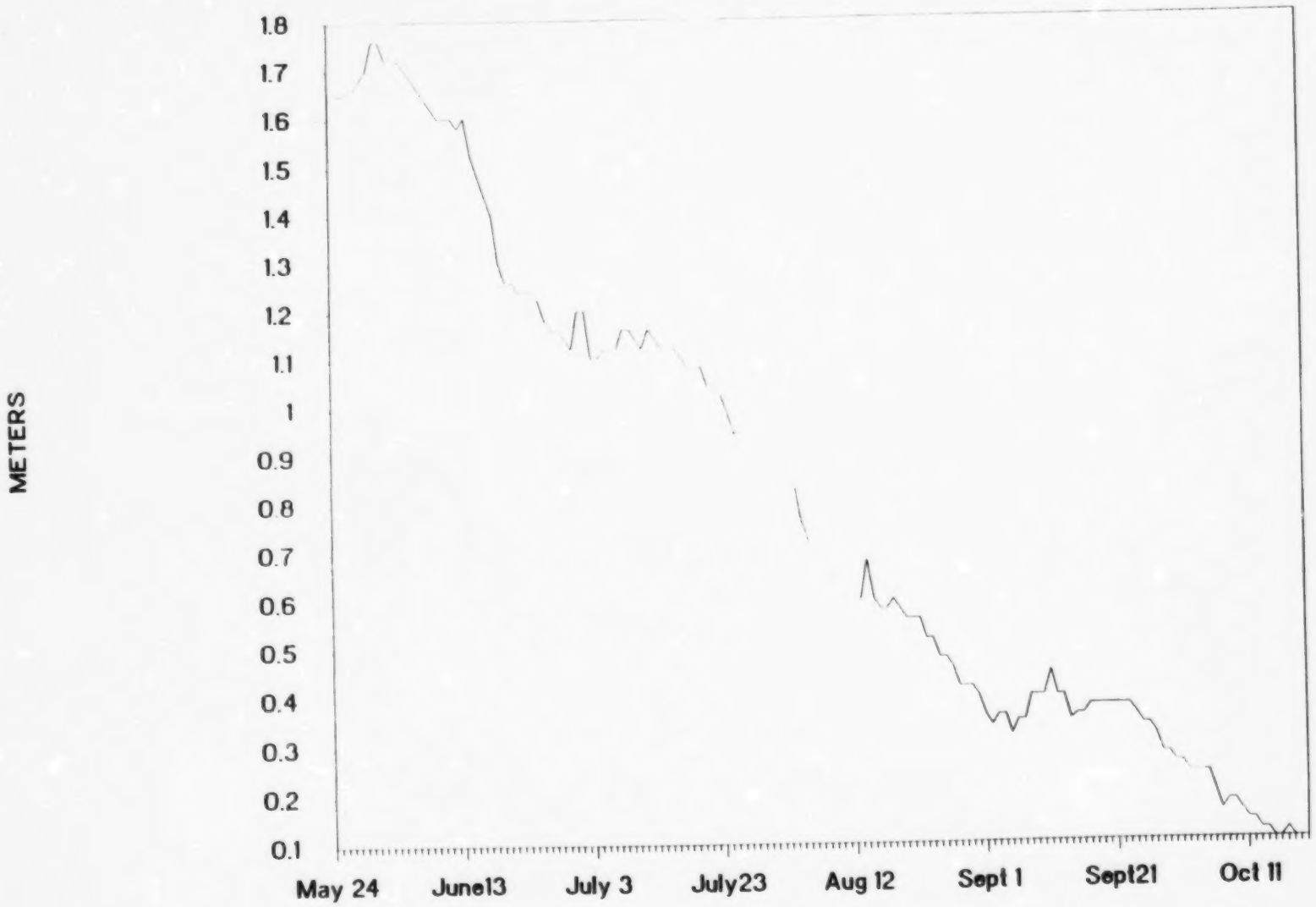

Table 1 :Daily and cumulative counts of large and jack Sockeye from the Babine River Fence, 1989.

DATE	JACK DAILY	JACK CUMULATIVE	LARGE DAILY	LARGE CUMULATIVE	TOTAL DAILY	TOTAL CUMULATIVE
Jul 4	0	0	1	1	1	1
5	0	0	0	1	0	1
6	0	0	0	1	0	1
7	0	0	3	4	3	4
8	0	0	10	14	10	14
9	0	0	25	39	25	39
10	0	0	39	78	39	78
11	0	0	90	168	90	168
12	0	0	217	385	217	385
13	0	0	273	658	273	658
14	2	2	451	1109	453	1111
15	12	14	914	2023	926	2037
16	21	35	1246	3269	1267	3304
17	55	90	2396	5665	2451	5755
18	154	244	6192	11857	6346	12101
19	344	588	9330	21187	9674	21775
20	336	924	7444	28631	7780	29555
21	352	1276	9572	38203	9924	39479
22	398	1674	10400	48603	10798	50277
23	448	2122	11293	59896	11741	62018
24	588	2710	14526	74422	15114	77132
25	740	3450	15006	89428	15746	92878
26	922	4372	16966	106394	17888	110766
27	1498	5870	22883	129277	24381	135147
28	1091	6961	18270	147547	19361	154508
29	1148	8109	16966	164513	18114	172622
30	1198	9307	14964	179477	16162	188784
31	1365	10672	17770	197247	19135	207919
Aug 1	1738	12410	12191	209438	13929	221848
2	1532	13942	9404	218842	10936	232784
3	1479	15421	12891	231733	14370	247154
4	1510	16931	12096	243829	13606	260760
5	1877	18808	21057	264886	22934	283694
6	2100	20908	22181	287067	24281	307975
7	2623	23531	29550	316617	32173	340148
8	2621	26152	29817	346434	32438	372586
9	2537	28689	27575	374009	30112	402698
10	2573	31262	35921	409930	38494	441192
11	2352	33614	33215	443145	35567	476759
12	2582	36196	33500	476645	36082	512841
13	2191	38387	30086	506731	32277	545118
14	2383	40770	31569	538300	33952	579070
15	2046	42816	27940	566240	29986	609056
16	2633	45449	34971	601211	37604	646660
17	2278	47727	32407	633618	34685	681345
18	2332	50059	32496	666114	34828	716173
19	2481	52540	33249	699363	35730	751903

Table 1 cont'd :Daily and cumulative counts of large and jack Sockeye from the Babine Fence,1989.

DATE	JACK DAILY	JACK CUMULATIVE	LARGE DAILY	LARGE CUMULATIVE	TOTAL DAILY	TOTAL CUMULATIVE
Aug 20	2893	55433	33341	732704	36234	788137
21	3060	58493	30348	763052	33408	821545
22	2650	61143	31230	794282	33880	855425
23	2889	64032	31987	826269	34876	890301
24	2455	66487	27580	853849	30035	920336
25	2342	68829	26130	879979	28472	948808
26	2782	71611	30171	910150	32953	981761
27	3249	74860	28150	938300	31399	1013160
28	3577	78437	22981	961281	26558	1039718
29	3891	82328	23617	984898	27508	1067226
30	4195	86523	21366	1006264	25561	1092787
31	4310	90833	17936	1024200	22246	1115033
Sept 1	3602	94435	16269	1040469	19871	1134904
2	3229	97664	14311	1054780	17540	1152444
3	2997	100661	12344	1067124	15341	1167785
4	2941	103602	9483	1076607	12424	1180209
5	2599	106201	6382	1082989	8981	1189190
6	2514	108715	6347	1089336	8861	1198051
7	2379	111094	7652	1096988	10031	1208082
8	1837	112931	5847	1102835	7684	1215766
9	2272	115203	6826	1109661	9098	1224864
10	1597	116800	4662	1114323	6259	1231123
11	881	117681	2748	1117071	3629	1234752
12	724	118405	2159	1119230	2883	1237635
13	548	118953	1862	1121092	2410	1240045
14	675	119628	2026	1123118	2701	1242746
15	468	120096	1429	1124547	1897	1244643
16	197	120293	867	1125414	1064	1245707
17	204	120497	793	1126207	997	1246704
18	179	120676	677	1126884	856	1247560
19	214	120890	686	1127570	900	1248460
20	204	121094	739	1128309	943	1249403
21	212	121306	639	1128948	851	1250254
22	229	121535	729	1129677	958	1251212
23	222	121757	606	1130283	828	1252040
24	79	121836	239	1130522	318	1252358
25	123	121959	302	1130824	425	1252783
26	106	122065	159	1130983	265	1253048
27	69	122134	123	1131106	192	1253240
28	119	122253	240	1131346	359	1253599
29	104	122357	205	1131551	309	1253908
30	202	122559	290	1131841	492	1254400
Oct 1	20	122579	73	1131914	93	1254493
2	36	122615	68	1131982	104	1254597
3	26	122641	49	1132031	75	1254672
4	14	122655	39	1132070	53	1254725
5	22	122677	42	1132112	64	1254789

Table 1 cont'd :Daily and cumulative counts of large and jack Sockeye from the Babine Fence,1989.

DATE	JACK DAILY	JACK CUMULATIVE	LARGE DAILY	LARGE CUMULATIVE	TOTAL DAILY	TOTAL CUMULATIVE
Oct 6	8	122685	26	1132138	34	1254823
7	6	122691	39	1132177	45	1254868
8	3	122694	30	1132207	33	1254901
9	9	122703	31	1132238	40	1254941
10	4	122707	27	1132265	31	1254972
11	1	122708	11	1132276	12	1254984
12	1	122709	7	1132283	8	1254992
13	0	122709	11	1132294	11	1255003
14	1	122710	5	1132299	6	1255009
15	0	122710	2	1132301	2	1255011
16	0	122710	2	1132303	2	1255013
17	1	122711	3	1132306	4	1255017
18	0	122711	4	1132310	4	1255021
19	0	122711	4	1132314	4	1255025
20	0	122711	2	1132316	2	1255027

Table 1 cont'd :Daily and cumulative counts for jack Sockeye Harvested at the Babine River Fence, 1989.

Date	Daily Harvest	Cumulative Harvest
Aug 2	533	533
Aug 3	499	1032
Aug 4	493	1525
Aug 5	582	2107
Aug 6	605	2712
Aug 7	937	3649
Aug 8	857	4506
Aug 9	1091	5597
Aug 10	995	6592
Aug 11	748	7340
Aug 12	928	8268
Aug 13	944	9212
Aug 14	1213	10425
Aug 15	923	11348
Aug 16	1252	12600
Aug 17	1075	13675
Aug 18	1105	14780
Aug 19	1050	15830
Aug 20	1220	17050
Aug 21	1439	18489
Aug 22	1278	19767
Aug 23	1357	21124
Aug 24	1150	22274
Aug 25	1184	23458
Aug 26	0	23458
Aug 27	0	23458
Aug 28	1831	25289
Aug 29	1888	27177
Aug 30	2203	29380
Aug 31*	3362	32742
Sept 1	2909	35651
Sept 2	2772	38423
Sept 3	2558	40981
Sept 4	2603	43584
Sept 5	2385	45969
Sept 6	2193	48162
Sept 7	2101	50263
Sept 8	1678	51941

* indicates the first day of two 7 hour shifts.

Table 2 :Daily and cumulative counts of large and jack Chinook from the Babine River Fence, 1989.

DATE	JACK DAILY	JACK CUMULATIVE	LARGE DAILY	LARGE CUMULATIVE	TOTAL DAILY	TOTAL CUMULATIVE
Jul 17	0	0	1	1	1	1
18	0	0	5	6	5	6
19	0	0	6	12	6	12
20	2	2	3	15	5	17
21	3	5	10	25	13	30
22	4	9	12	37	16	46
23	0	9	4	41	4	50
24	1	10	6	47	7	57
25	0	10	1	48	1	58
26	0	10	1	49	1	59
27	0	10	1	50	1	60
28	0	10	3	53	3	63
29	0	10	0	53	0	63
30	0	10	5	58	5	68
31	0	10	7	65	7	75
Aug 1	1	11	0	65	1	76
2	0	11	2	67	2	78
3	0	11	3	70	3	81
4	2	13	5	75	7	88
5	3	16	1	76	4	92
6	0	16	7	83	7	99
7	1	17	2	85	3	102
8	0	17	6	91	6	108
9	0	17	1	92	1	109
10	2	19	2	94	4	113
11	1	20	12	106	13	126
12	0	20	18	124	18	144
13	0	20	14	138	14	158
14	0	20	25	163	25	183
15	0	20	20	183	20	203
16	7	27	17	200	17	227
17	2	29	31	231	31	260
18	1	30	28	259	28	289
19	4	34	35	294	35	328
20	2	36	37	331	37	367
21	0	36	25	356	25	392
22	4	40	30	386	30	426
23	7	47	32	418	32	465
24	0	47	20	438	20	485
25	7	54	26	464	26	518
26	3	57	19	483	19	540
27	1	58	29	512	29	570
28	1	59	31	543	31	602
29	3	62	21	564	21	626
30	3	65	14	578	14	643
31	2	67	25	603	25	670
Sept 1	2	69	16	619	16	688
2	2	71	31	650	31	721
3	10	81	43	693	43	774
4	1	82	43	736	43	818

Table 2 cont'd :Daily and cumulative counts of large and jack Chinook from the Babine River Fence, 1989

DATE	JACK DAILY	JACK CUMULATIVE	LARGE DAILY	LARGE CUMULATIVE	TOTAL DAILY	TOTAL CUMULATIVE
Sept 5	2	84	14	750	16	834
6	3	87	37	787	40	874
7	2	89	51	838	53	927
8	2	91	42	880	44	971
9	2	93	66	946	68	1039
10	3	96	46	992	49	1088
11	11	107	96	1088	107	1195
12	3	110	40	1128	43	1238
13	2	112	18	1146	20	1258
14	2	114	47	1193	49	1307
15	3	117	34	1227	37	1344
16	1	118	41	1268	42	1386
17	2	120	59	1327	61	1447
18	1	121	55	1382	56	1503
19	0	121	33	1415	33	1536
20	0	121	43	1458	43	1579
21	2	123	68	1526	70	1649
22	0	123	67	1593	67	1716
23	2	125	91	1684	93	1809
24	1	126	61	1745	62	1871
25	0	126	62	1807	62	1933
26	4	130	39	1846	43	1976
27	5	135	49	1895	54	2030
28	1	136	20	1915	21	2051
29	3	139	17	1932	20	2071
30	6	145	20	1952	26	2097
Oct 1	2	147	9	1961	11	2108
2	0	147	13	1974	13	2121
3	0	147	4	1978	4	2125
4	0	147	3	1981	3	2128
5	1	148	1	1982	2	2130
6	1	149	0	1982	1	2131
7	0	149	1	1983	1	2132
8	0	149	0	1983	0	2132
9	0	149	0	1983	0	2132
10	0	149	0	1983	0	2132
11	0	149	0	1983	0	2132

Table 3 :Daily and cumulative counts of Pink and Steelhead from the Babine River Fence, 1989

DATE	PINK		STEELHEAD	
	DAILY	CUMULATIVE	DAILY	CUMULATIVE
Jul 29	3	3	0	0
30	2	5	0	0
31	4	9	0	0
Aug 1	6	15	0	0
2	5	20	0	0
3	28	48	0	0
4	42	90	0	0
5	190	280	0	0
6	307	587	0	0
7	687	1274	0	0
8	1268	2542	0	0
9	1686	4228	0	0
10	3202	7430	0	0
11	3923	11353	0	0
12	5818	17171	0	0
13	6268	23439	1	1
14	5336	28775	0	1
15	3443	32218	0	1
16	7811	40029	0	1
17	7664	47693	0	1
18	5619	53312	1	2
19	5948	59260	0	2
20	7058	66318	0	2
21	8332	74650	1	3
22	9464	84114	1	4
23	11078	95192	0	4
24	9142	104334	2	6
25	7828	112162	1	7
26	9022	121184	1	8
27	11808	132992	1	9
28	14104	147096	0	9
29	14927	162023	0	9
30	14131	176154	0	9
31	14022	190176	0	9
Sept 1	13370	203546	0	9
2	12563	216109	1	10
3	13502	229611	0	10
4	13380	242991	0	10
5	9745	252736	0	10
6	9040	261776	0	10
7	13015	274791	0	10
8	11840	286631	0	10
9	12508	299139	2	12
10	7993	307132	0	12
11	6706	313838	0	12
12	4587	318425	0	12
13	4485	322910	0	12
14	4740	327650	1	13
15	3922	331572	0	13
16	1401	332973	0	13
17	1194	334167	0	13

Table 3 cont'd :Daily and cumulative counts of Pink and Steelhead from the Babine River Fence, 1989.

DATE	PINK DAILY	PINK CUMULATIVE	STEELHEAD DAILY	STEELHEAD CUMULATIVE
Sept 18	849	335016	0	13
19	932	335948	0	13
20	937	336885	0	13
21	753	337638	0	13
22	837	338475	2	15
23	856	339331	0	15
24	190	339521	0	15
25	320	339841	0	15
26	110	339951	0	15
27	35	339986	1	16
28	40	340026	0	16
29	25	340051	0	16
30	15	340066	0	16
Oct 1	3	340069	0	16
2	1	340070	0	16
3	0	340070	1	17
4	0	340070	0	17
5	3	340073	2	19
6	0	340073	1	20
7	0	340073	0	20
8	0	340073	0	20
9	0	340073	0	20
10	1	340074	0	20
11	1	340075	0	20
12	0	340075	0	20
13	0	340075	0	20
14	0	340075	1	21
15	0	340075	0	21
16	0	340075	0	21
17	0	340075	0	21
18	0	340075	0	21
19	0	340075	0	21
20	0	340075	0	21

Table 4 :Daily and cumulative counts of Coho from Babine River Counting Fence, 1989.

Date	Daily Coho	Accum Coho	Clipped Coho
Aug 6	4	4	
7	2	6	
8	3	9	
9	2	11	
10	1	12	
11	4	16	
12	6	22	
13	5	27	
14	6	33	
15	3	36	
16	9	45	
17	21	66	
18	21	87	
19	27	114	
20	45	159	
21	48	207	
22	54	261	
23	73	334	
24	68	402	
25	63	465	
26	74	539	
27	62	601	1 (1)
28	107	708	1 (2)
29	127	835	2 (4)
30	158	993	1 (5)
31	153	1146	1 (6)
Sept 1	89	1235	0 (6)
2	148	1383	1 (7)
3	138	1521	0 (7)
4	191	1712	1 (8)
5	113	1825	1 (9)
6	128	1953	0 (9)
7	213	2166	2 (11)
8	177	2343	3 (14)
9	265	2608	6 (20)
10	161	2769	6 (26)
11	145	2914	1 (27)
12	110	3024	2 (29)
13	116	3140	7 (36)
14	167	3307	4 (40)
15	116	3423	8 (48)
16	35	3458	1 (49)
17	48	3506	2 (51)
18	49	3555	0 (51)
19	61	3616	6 (57)

Table 4 cont'd :Daily and cumulative counts of Coho from the Babine River Counting Fence, 1989.

Date	Daily Coho	Accum Coho	Clipped Coho
Sept 20	69	3685	3 (60)
21	81	3766	2 (62)
22	104	3870	9 (71)
23	129	3999	6 (77)
24	125	4124	4 (81)
25	65	4189	2 (83)
26	107	4296	8 (91)
27	57	4353	3 (94)
28	82	4435	2 (96)
29	81	4516	8 (104)
30	156	4672	15 (119)
Oct 1	76	4748	4 (123)
2	68	4816	6 (129)
3	51	4867	4 (133)
4	38	4905	7 (140)
5	56	4961	8 (148)
6	38	4999	3 (151)
7	38	5037	4 (155)
8	43	5080	0 (155)
9	40	5120	3 (158)
10	36	5156	5 (163)
11	16	5172	0 (163)
12	11	5183	2 (165)
13	6	5189	0 (165)
14	10	5199	0 (165)
15	5	5204	0 (165)
16	4	5208	0 (165)
17	4	5212	0 (165)
18	3	5215	0 (165)
19	3	5218	2 (167)
20	10	5228	1 (168)

Figure 4: Daily Babine River Fence counts of large Sockeye, 1989.

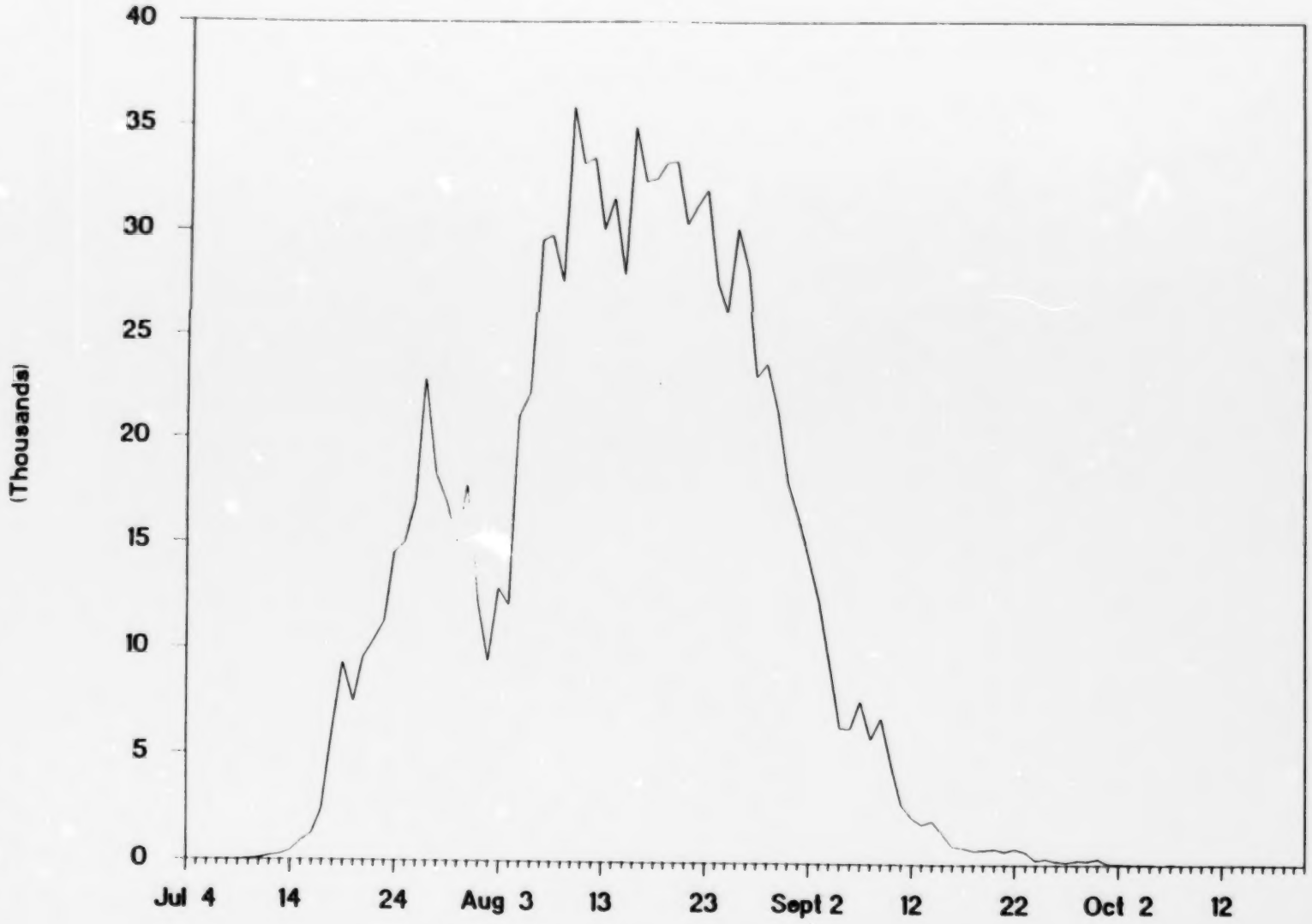

Figure 4: Daily Babine River Fence counts of jack Sockeye, 1989.

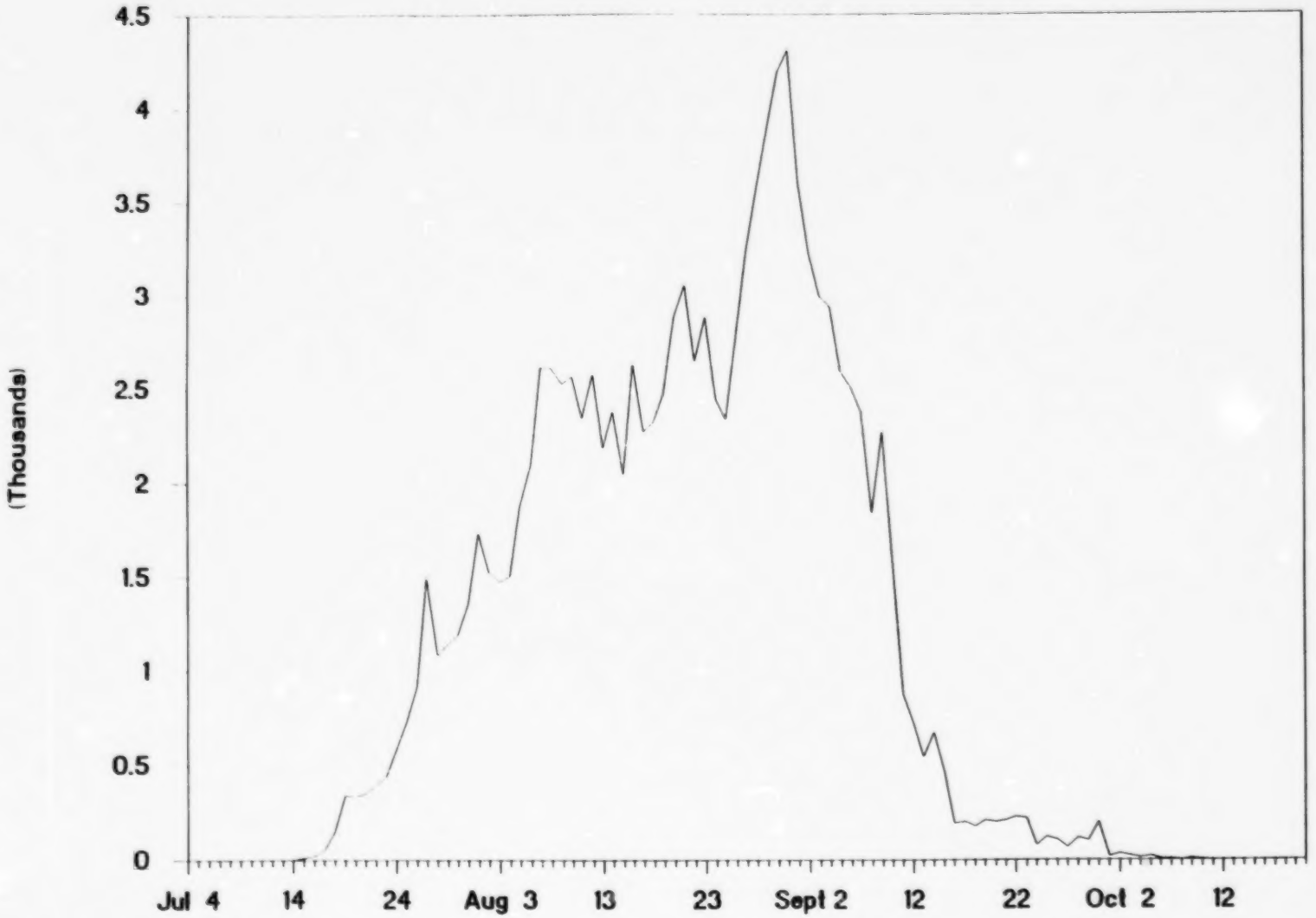

Figure 5: Daily Babine River Fenceccounts of Pink salmon, 1989.

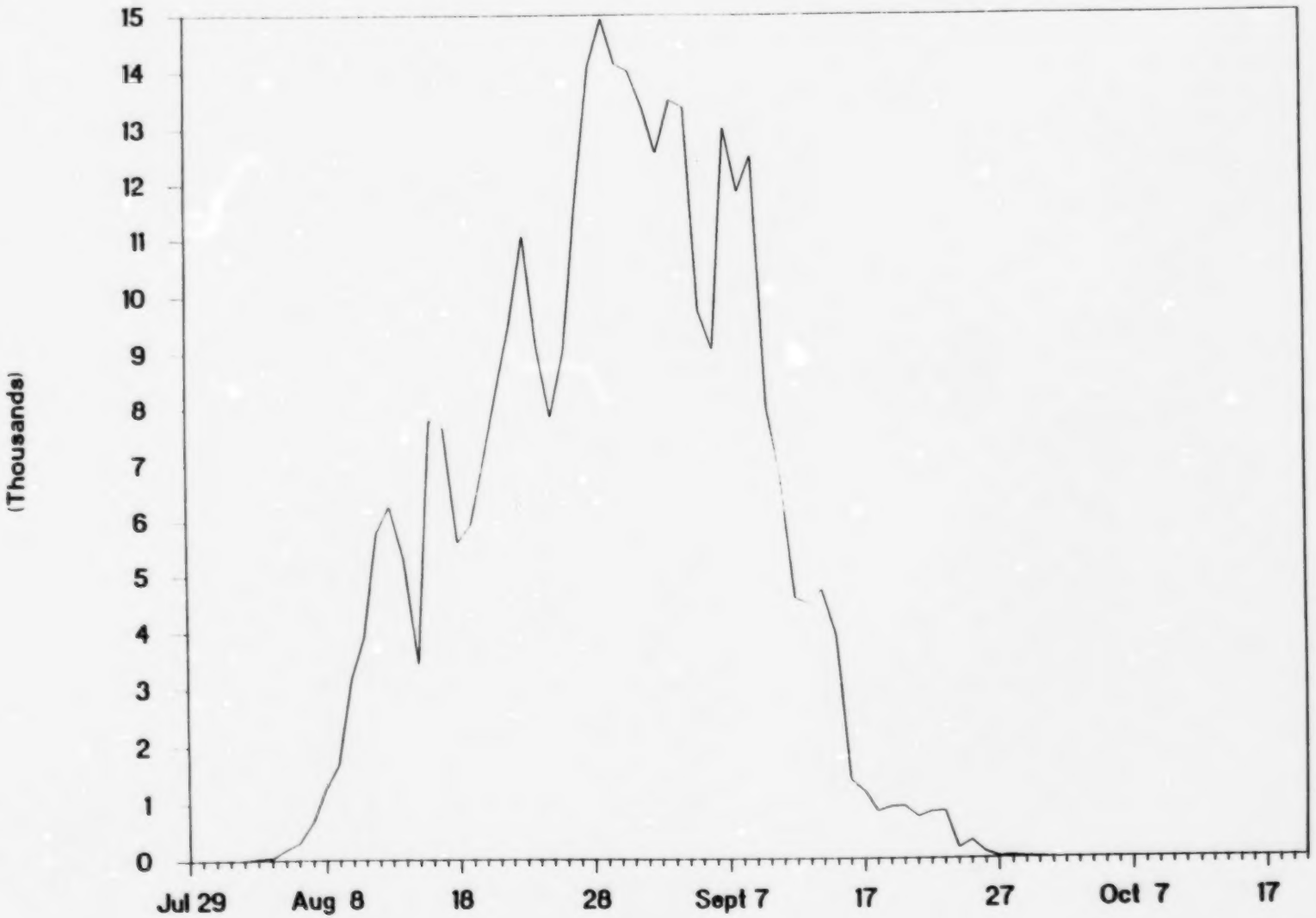

Figure 6: Daily Babine River Fence counts of Chinook salmon, 1989.

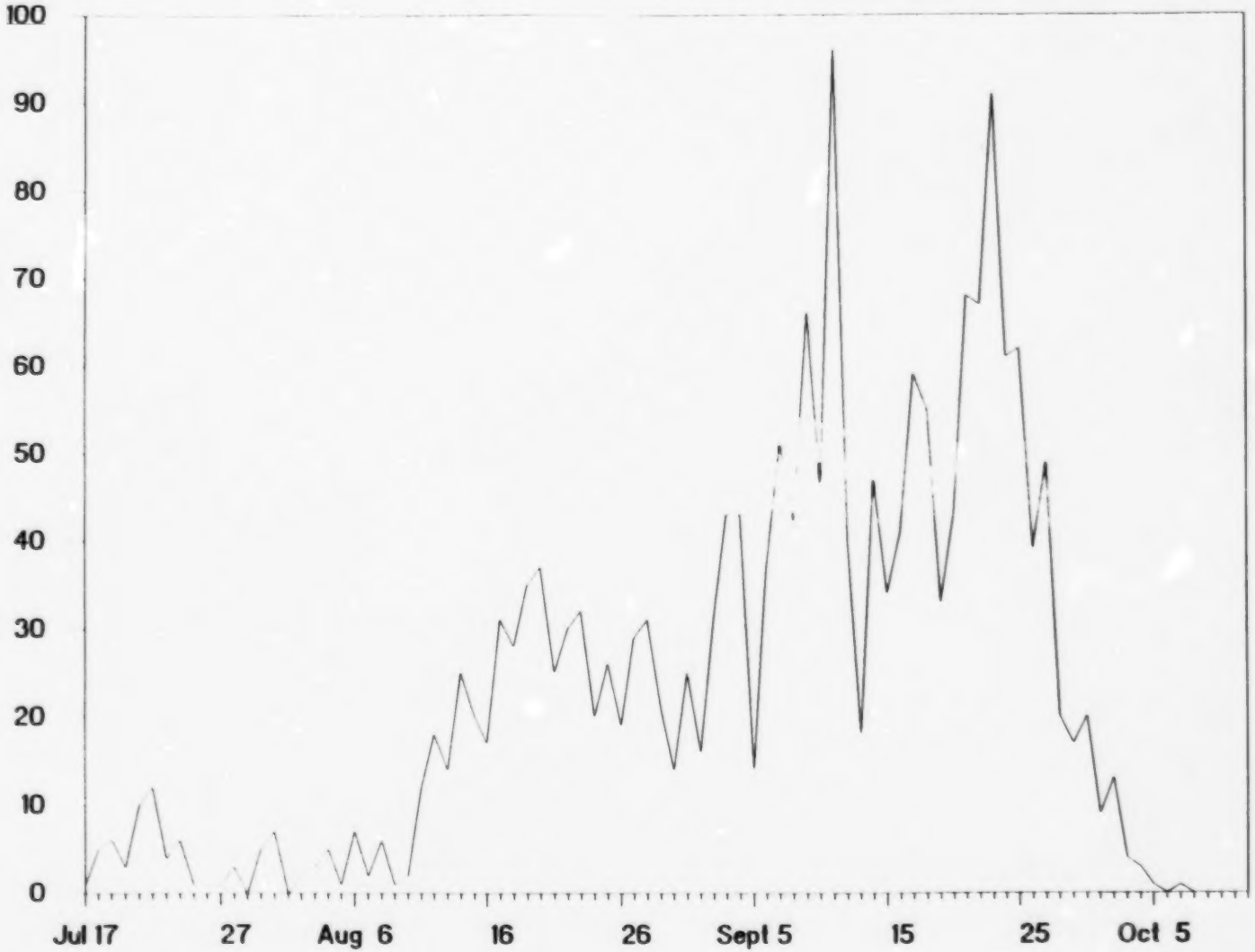

Figure 7: Daily Babine River Fence counts of Coho salmon, 1989.

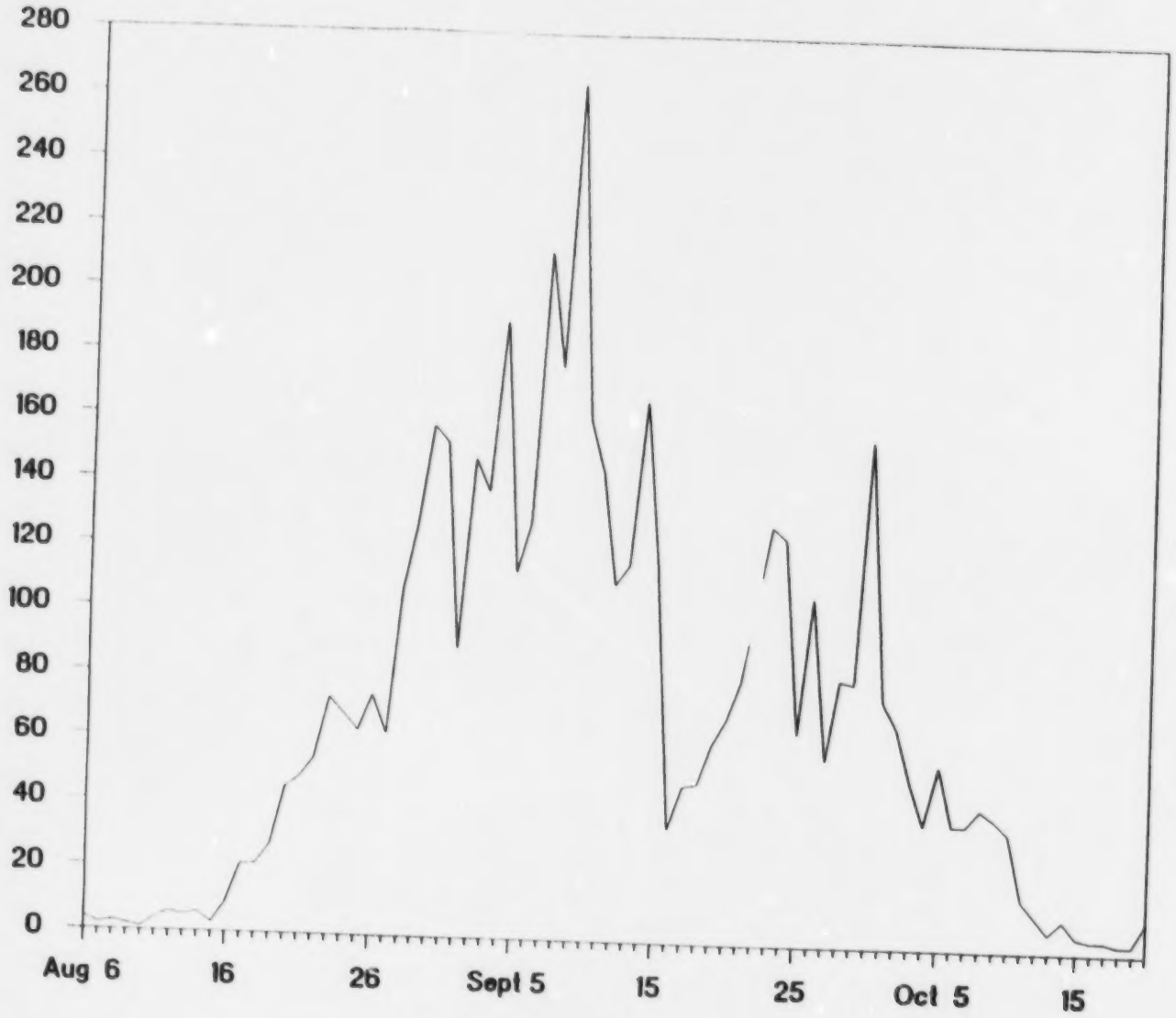

Table 5: Biological information from Sockeye samples collected at the Babine River Fence in 1989.

Date	Hypural Length	N - F Length	Sex	Age
July20	400	475	F	4_2
20	415	500	F	4_2
20	515	635	F	5_2
20	500	610	F	5_2
20	485	620	M	5_2
20	370	470	M	4_2
20	405	490	M	4_2
20	530	680	F	4_2
20	410	500	M	4_2
20	530	650	M	5_2
20	510	590	F	5_2
20	500	590	M	5_2
20	525	670	F	5_2
20	500	620	F	5_2
20	505	620	M	5_2
20	500	605	M	5_2
20	410	505	M	4_2
20	500	630	F	RG
20	540	630	M	5_2
20	395	500	F	4_2
20	500	610	M	RS
20	500	610	F	5_2
20	420	500	F	4_2
20	360	460	M	4_2
20	475	570	F	5_2
July21	510	625	F	5_2
21	470	600	F	5_2
21	420	500	M	4_2
21	490	610	F	5_2
21	520	640	M	5_2
21	515	630	M	5_2
21	520	645	M	5_2
21	500	630	M	5_2
21	400	500	M	4_2
21	560	690	M	5_2
21	505	600	F	5_2
21	515	630	F	5_2
21	530	650	M	5_2
21	465	570	F	5_2
21	400	475	M	4_2
21	455	555	F	4_2
21	500	610	F	5_2
21	390	475	M	4_2
21	415	500	F	4_2
21	500	590	F	5_2
21	380	490	M	4_2
21	360	450	M	4_2
21	490	600	F	5_2
21	500	620	F	5_2
21	530	635	F	5_2

Table 5 cont'd :Biological information from Sockeye samples collected at the Babine River Fence in 1989.

Date	Hypural Length	N - F Length	Sex	Age
July26	420	540	F	4_2
26	390	480	M	4_2
26	410	535	M	4_2
26	460	565	M	4_2
26	470	600	F	5_2
26	410	510	F	4_2
26	510	620	F	5_2
26	400	485	F	4_2
26	520	625	F	5_2
26	420	530	M	4_2
26	540	655	M	5_2
26	520	620	F	5_2
26	540	650	F	RS
26	480	580	M	4_2
26	520	630	F	5_2
26	530	640	M	5_2
26	510	620	F	5_2
26	570	675	M	5_2
26	530	640	F	5_2
26	580	700	M	5_2
26	420	525	M	4_2
26	420	500	F	4_2
26	410	500	M	4_2
26	520	635	M	5_2
26	430	520	F	4_2
July26	410	490	M	4_2
26	445	560	F	4_2
26	400	490	M	4_2
26	400	490	M	4_2
26	390	500	F	4_2
26	475	570	M	5_2
26	430	530	M	5_2
26	430	530	M	4_2
26	470	630	F	4_2
26	435	530	F	4_2
26	415	500	M	RG
26	510	650	M	5_2
26	395	490	F	4_2
26	410	500	M	4_2
26	385	480	F	4_2
26	435	520	M	4_2
26	400	510	M	4_2
26	465	570	F	5_2
26	420	510	M	4_2
26	455	540	F	4_2
26	390	480	M	4_2
26	375	480	F	4_2
26	415	510	F	4_2
26	550	670	M	5_2
26	465	570	M	4_2

Table 5 cont'd :Biological information from Sockeye samples collected at the Babine River Fence in 1989.

Date	Hypural Length	N - F Length	Sex	Age
Aug 1	390	480	M	4_2
1	485	580	F	6_3
1	490	600	F	5_2
1	490	590	F	5_2
1	530	630	F	5_2
1	480	590	F	5_2
1	535	430	M	4_2
1	420	510	M	4_2
1	510	620	F	5_2
1	420	500	M	4_2
1	390	480	M	4_2
1	410	500	M	4_2
1	480	590	M	5_2
1	450	520	M	4_2
1	410	495	M	4_2
1	440	520	F	4_2
1	390	470	F	4_2
1	420	520	F	4_2
1	440	550	F	4_2
1	470	570	F	4_2
1	450	530	F	4_2
1	460	540	F	4_2
1	410	500	F	4_2
1	500	610	F	5_2
1	420	500	M	4_2
Aug 1	400	480	F	W
1	490	610	F	5_2
1	530	640	F	5_2
1	530	610	M	W
1	530	650	F	RG
1	420	530	M	RG
1	380	450	F	4_2
1	410	490	M	W
1	550	630	F	RG
1	380	450	F	W
1	470	560	F	RG
1	500	580	F	4_2
1	490	590	F	5_2
1	450	520	F	4_2
1	440	530	M	5_2
1	510	600	F	5_2
1	540	670	M	5_2
1	400	470	M	4_2
1	460	540	F	W
1	390	460	M	4_2
1	410	480	F	RG
1	400	490	M	4_2
1	390	480	M	4_2
1	500	590	F	5_2
1	400	490	M	4_2

Table 5 cont'd :Biological information from Sockeye samples collected at the Babine River Fence in 1989.

Date	Hypural Length	N - F Length	Sex	Age
Aug 4	430	540	F	4_2
4	475	590	M	5_2
4	395	490	M	4_2
4	525	650	F	5_2
4	525	635	M	5_2
4	515	630	F	5_2
4	505	610	F	5_2
4	490	605	M	5_2
4	505	610	F	5_2
4	530	665	M	5_2
4	390	485	M	4_2
4	410	490	M	4_2
4	470	560	F	4_2
4	480	575	F	4_2
4	375	470	M	4_2
4	410	500	M	4_2
4	420	515	M	4_2
4	450	555	M	4_2
4	510	630	M	5_2
4	505	620	F	5_2
4	525	640	F	5_2
4	490	590	F	5_2
4	440	540	F	RG
4	415	505	M	4_2
4	395	470	M	4_2
Aug 4	390	475	M	4_2
4	510	625	M	5_2
4	430	510	M	4_2
4	375	450	M	4_2
4	375	540	M	4_2
4	410	490	F	4_2
4	415	490	M	4_2
4	405	480	F	RG
4	410	490	M	4_2
4	430	520	F	4_2
4	435	530	M	4_2
4	465	570	F	5_2
4	480	580	F	5_2
4	390	485	M	4_2
4	375	450	F	4_2
4	515	630	F	5_2
4	435	530	M	4_2
4	510	610	F	5_2
4	380	480	M	4_2
4	485	590	F	5_2
4	485	590	M	RS
4	390	475	M	4_2
4	530	655	M	RG
4	395	475	M	RG
4	400	485	M	4_2

Table 5 cont'd :Biological information from Sockeye samples collected at the Babine River Fence in 1989.

Date	Hypural Length	N - F Length	Sex	Age
Aug 8	545	660	M	5_2
8	410	480	F	4_2
8	445	540	M	4_2
8	550	680	M	RG
8	465	550	F	RS
8	410	500	F	4_2
8	435	520	M	4_2
8	460	550	F	4_2
8	540	670	M	5_2
8	440	530	F	4_2
8	510	620	F	5_2
8	415	510	F	4_2
8	470	580	F	4_2
8	445	560	F	4_2
8	420	510	M	4_2
8	490	580	F	4_2
8	430	520	M	4_2
8	505	610	F	5_2
8	415	490	F	4_2
8	450	540	F	RG
8	495	590	F	5_2
8	550	670	M	5_2
8	545	640	F	5_2
8	470	560	F	5_2
8	460	560	M	4_2
Aug 8	550	680	M	5_2
8	395	480	M	4_2
8	505	630	F	5_2
8	385	480	M	4_2
8	475	580	F	4_2
8	510	640	F	5_2
8	440	540	F	4_2
8	395	490	M	4_2
8	415	510	M	4_2
8	400	500	M	4_2
8	435	520	F	4_2
8	390	490	M	4_2
8	465	550	F	4_2
8	420	520	M	4_2
8	490	600	M	4_2
8	495	610	F	5_2
8	395	480	M	4_2
8	410	510	M	4_2
8	460	570	M	RG
8	450	580	M	4_2
8	530	660	F	5_2
8	490	610	F	5_2
8	450	550	F	4_2
8	460	550	F	4_2
8	510	620	F	5_2

Table 5 cont'd :Biological information from Sockeye samples collected at the Babine River Fence in 1989.

Date	Hypural Length	N - F Length	Sex	Age
Aug11	495	600	F	5_2
11	410	480	M	4_2
11	460	560	M	4_2
11	545	650	F	5_2
11	535	650	F	5_2
11	390	470	M	4_2
11	410	510	M	4_2
11	440	540	F	4_2
11	460	550	F	4_2
11	455	560	F	4_2
11	505	610	F	RS
11	475	570	F	4_2
11	455	550	F	4_2
11	505	620	F	5_2
11	440	535	M	5_2
11	550	660	F	4_2
11	495	595	F	5_2
11	430	520	F	4_2
11	550	690	M	RG
11	445	550	F	RG
11	465	550	F	5_2
11	470	565	F	4_2
11	455	550	F	RS
11	535	665	M	5_2
11	510	620	F	5_2

Table 5 cont'd :Biological information from Sockeye samples collected at the Babine River Fence in 1989.

Date	Hypural Length	N - F Length	Sex	Age
Aug15	445	530	M	RS
15	435	530	M	4_2
15	470	570	M	4_2
15	490	630	F	4_2
15	500	610	M	5_2
15	510	640	F	5_2
15	535	690	F	5_2
15	430	520	F	4_2
15	460	580	F	5_2
15	525	630	M	RS
15	415	500	M	4_2
15	480	590	F	4_2
15	405	500	F	4_2
15	490	600	M	5_2
15	505	620	M	5_2
15	525	660	F	5_2
15	435	540	F	4_2
15	385	470	F	4_2
15	450	550	M	4_2
15	450	530	M	4_2
15	430	530	F	4_2
15	455	560	F	4_2
15	525	650	F	4_2
15	480	580	M	5_2
15	470	590	F	5_3
Aug15	515	630	M	5_2
15	405	510	F	4_2
15	480	580	M	5_2
15	425	530	F	4_2
15	455	550	M	4_2
15	410	500	F	4_2
15	445	540	M	4_2
15	450	560	M	4_2
15	445	550	F	4_2
15	460	560	M	RG
15	485	600	M	5_2
15	465	560	M	4_2
15	440	530	M	4_2
15	445	550	F	4_2
15	510	620	M	5_2
15	415	510	F	4_2
15	405	490	M	4_2
15	515	630	F	5_3
15	455	550	M	4_2
15	510	610	M	RG
15	510	650	F	4_2
15	550	690	F	6_2
15	520	620	M	5_2
15	490	590	M	5_2
15	480	590	M	4_2

Table 5 cont'd :Biological information from Sockeye samples collected at the Babine River Fence in 1989.

Date	Hypural Length	N - F Length	Sex	Age
Aug19	540	635	F	5_2
19	415	505	M	4_2
19	465	560	F	4_2
19	400	475	M	RG
19	510	620	F	5_2
19	400	490	M	4_2
19	435	530	M	4_2
19	540	670	M	5_2
19	430	515	M	4_2
19	455	550	F	5_2
19	500	615	F	RS
19	485	580	F	4_2
19	450	535	F	4_2
19	415	510	M	4_2
19	480	590	F	5_2
19	480	570	F	4_2
19	515	640	M	4_2
19	510	610	F	RS
19	455	545	F	4_2
19	475	575	F	4_2
19	525	630	F	4_2
19	440	535	F	4_2
19	460	550	M	4_2
19	480	585	F	5_2
19	440	530	F	RG
Aug19	460	575	F	5_2
19	475	595	M	RS
19	410	510	M	4_2
19	450	550	F	4_2
19	400	485	M	4_2
19	460	580	M	4_2
19	450	550	F	4_2
19	540	675	M	RS
19	530	670	M	5_2
19	515	625	M	RG
19	525	655	M	5_2
19	445	540	F	4_2
19	500	600	M	RS
19	470	580	M	4_2
19	540	660	F	5_2
19	405	500	M	4_2
19	400	495	M	4_2
19	445	540	F	4_2
19	420	510	F	4_2
19	480	605	M	4_2
19	460	540	F	4_2
19	435	535	F	4_2
19	570	705	M	5_2
19	445	540	F	RG
19	420	530	F	4_2

Table 5 cont'd :Biological information from Sockeye samples collected at the Babine River Fence in 1989.

Date	Hypural Length	N - F Length	Sex	Age
Aug22	470	620	M	5_2
22	490	600	M	5_2
22	425	520	F	4_2
22	495	620	M	5_2
22	495	590	F	4_2
22	520	630	F	5_2
22	515	640	M	RS
22	540	650	F	5_2
22	475	590	F	RS
22	435	540	M	4_2
22	570	710	M	4_2
22	405	490	M	4_2
22	520	630	F	5_2
22	505	620	M	5_2
22	440	520	F	4_2
22	525	670	M	5_2
22	430	520	M	4_2
22	545	670	M	4_2
22	460	550	M	4_2
22	520	620	F	4_2
22	465	580	M	4_2
22	500	620	F	5_2
22	430	520	F	4_2
22	520	620	F	5_2
22	475	580	M	4_2
Aug22	470	560	F	4_2
22	510	620	F	5_2
22	465	550	F	4_2
22	385	480	F	4_2
22	435	530	M	4_2
22	490	610	F	5_2
22	445	550	M	4_2
22	535	680	M	4_2
22	395	490	F	4_2
22	460	550	F	4_2
22	325	670	M	5_2
22	495	610	M	4_2
22	435	530	F	4_2
22	410	510	M	4_2
22	470	580	F	5_2
22	445	550	M	4_2
22	445	540	M	4_2
22	510	620	M	5_2
22	500	600	F	5_2
22	520	630	M	5_2
22	515	640	M	4_2
22	385	480	M	RG
22	370	470	M	4_2
22	445	530	F	4_2
22	445	550	F	4_2

Table 5 cont'd :Biological information from Sockeye samples collected at the Babine River Fence in 1989.

Date	Hypural Length	N - F Length	Sex	Age
Aug25	445	560	M	4_2
25	465	600	M	RG
25	430	530	F	4_2
25	515	630	F	5_2
25	445	550	F	RS
25	475	580	F	RG
25	420	520	F	RS
25	530	640	F	4_2
25	425	520	M	4_2
25	465	560	F	4_2
25	535	650	F	5_2
25	435	530	F	4_2
25	420	520	M	4_2
25	450	550	F	4_2
25	410	500	M	4_2
25	445	550	M	4_2
25	525	670	M	5_2
25	475	600	F	5_2
25	435	540	F	4_2
25	510	620	F	4_2
25	455	550	F	4_2
25	450	540	F	4_2
25	520	630	F	RS
25	400	490	M	4_2
25	450	540	F	4_2
Aug25	435	520	F	4_2
25	325	520	F	4_2
25	550	670	M	4_2
25	430	550	F	4_2
25	440	540	M	4_2
25	485	590	F	5_2
25	365	450	M	4_2
25	420	510	F	4_2
25	385	480	M	4_2
25	480	590	M	4_2
25	420	510	F	4_2
25	530	650	M	5_2
25	460	560	F	4_2
25	515	630	F	5_2
25	455	550	M	4_2
25	495	620	F	5_2
25	535	650	M	RS
25	445	560	M	4_2
25	400	490	M	4_2
25	385	490	M	RG
25	515	620	F	5_2
25	460	560	F	4_2
25	535	670	M	4_2
25	470	560	F	4_2
25	445	540	M	4_2

Table 5 cont'd :Biological information from Sockeye samples collected at the Babine River Fence in 1989.

Date	Hypural Length	N - F Length	Sex	Age
Aug30	415	505	F	4_2
30	480	575	F	5_2
30	510	635	M	RS
30	440	530	F	4_2
30	450	540	F	4_2
30	410	505	F	4_2
30	530	635	F	5_2
30	510	615	F	5_2
30	530	650	F	5_2
30	440	540	F	4_2
30	515	635	M	4_2
30	510	615	F	5_2
30	455	540	F	4_2
30	440	530	F	4_2
30	405	495	M	4_2
30	470	575	F	RS
30	480	575	F	4_2
30	440	540	F	4_2
30	395	470	M	4_2
30	415	505	F	4_2
30	450	540	F	4_2
30	430	525	F	4_2
30	390	460	M	3_2
30	520	615	F	4_2
30	570	705	M	5_2
Aug30	515	625	F	5_2
30	420	525	F	4_2
30	440	590	M	4_2
30	530	645	F	5_2
30	450	560	F	4_2
30	395	490	M	4_2
30	440	540	F	4_2
30	415	510	F	4_2
30	450	550	F	4_2
30	515	635	M	4_2
30	495	600	F	5_2
30	470	575	M	4_2
30	540	665	F	5_2
30	525	650	M	5_2
30	520	635	F	5_2
30	485	595	F	RG
30	540	655	F	5_2
30	480	585	F	4_2
30	480	580	F	4_2
30	500	605	F	5_2
30	440	545	F	4_2
30	420	520	F	4_2
30	440	535	F	4_2
30	530	640	M	RS
30	480	485	F	4_2

Table 5 cont'd :Biological information from Sockeye samples collected at the Babine River Fence in 1989.

Date	Hypural Length	N - F Length	Sex	Age
Sept1	430	520	M	4_2
1	475	575	M	4_2
1	440	540	F	4_2
1	550	700	M	RS
1	510	650	F	4_2
1	500	640	F	5_2
1	405	600	M	5_2
1	510	630	M	5_2
1	415	520	F	4_2
1	430	540	M	4_2
1	540	685	F	5_2
1	420	515	M	4_2
1	445	545	M	5_2
1	485	585	M	5_2
1	505	630	M	5_2
1	465	575	M	4_2
1	445	540	M	4_2
1	475	580	F	4_2
1	530	655	F	5_2
1	485	590	F	5_2
1	470	565	F	RG
1	500	640	M	4_2
1	430	520	F	4_2
1	520	660	M	4_2
1	460	555	F	RS
1	520	635	F	RG
1	550	690	M	4_2
1	445	545	F	4_2
1	450	560	F	4_2
1	530	660	M	RG
1	450	550	F	4_2
1	450	545	M	4_2
1	470	595	F	4_2
1	540	680	M	RS
1	335	410	M	4_2
1	515	625	F	5_2
1	400	490	M	4_2
1	540	665	M	5_2
1	560	665	F	5_2
1	460	570	F	4_2
1	500	600	F	5_2
1	470	580	F	4_2
1	535	640	F	5_2
1	435	515	F	4_2
1	340	490	M	4_2
1	500	595	F	4_2
1	420	530	M	4_2
1	440	540	F	4_2
1	450	555	F	4_2
1	455	570	M	4_2

Table 5 cont'd :Biological information from Sockeye samples collected at the Babine River Fence in 1989.

Date	Hypural Length	N - F Length	Sex	Age
Sept5	425	525	F	RG
5	425	540	M	4_2
5	415	500	F	4_2
5	465	575	F	RG
5	460	575	M	4_2
5	485	590	F	5_2
5	465	590	M	4_2
5	435	530	F	4_2
5	530	660	M	5_2
5	410	520	F	4_2
5	510	620	F	5_2
5	420	520	F	4_2
5	490	600	M	4_2
5	445	550	F	4_2
5	440	530	F	4_2
5	425	520	F	4_2
5	475	595	F	5_2
5	440	550	F	RG
5	520	670	M	4_2
5	410	500	F	4_2
5	465	565	F	4_2
5	500	615	F	5_2
5	500	625	F	5_2
5	475	590	F	5_2
5	530	640	F	RG
5	480	600	F	4_2
5	505	620	M	5_2
5	470	600	F	RS
5	445	545	M	4_2
5	515	645	M	4_2
5	525	685	F	5_2
5	445	555	F	4_2
5	420	515	M	4_2
5	520	635	M	5_2
5	445	560	F	4_2
5	440	535	M	4_2
5	575	710	F	4_2
5	490	605	M	RG
5	470	585	M	4_2
5	450	560	M	4_2
5	490	630	F	5_2
5	510	645	F	4_2
5	395	505	F	4_2
5	550	685	F	4_2
5	460	565	M	RG
5	505	625	M	5_2
5	525	665	F	5_2
5	520	640	M	5_2
5	440	545	M	5_2
5	505	650	F	5_2

Table 5 cont'd : Biological information from Sockeye samples collected at the Babine River Fence, 1989

DATE	SEX	N - F LENGTH	DATE	SEX	N - F LENGTH
July22	F	450	July 22	F	620
22	F	470	22	F	620
22	F	480	22	F	620
22	F	490	22	F	620
22	F	510	22	F	660
22	F	550	22	F	670
22	F	570	22	M	460
22	F	590	22	M	470
22	F	600	22	M	480
22	F	600	22	M	490
22	F	600	22	M	490
22	F	600	22	M	510
22	F	600	22	M	520
22	F	610	22	M	530
22	F	610	22	M	530
22	F	610	22	M	540
22	F	610	22	M	580
22	F	610	22	M	580
22	F	610	22	M	600
22	F	620	22	M	610
22	F	620	22	M	620
22	F	620	22	M	620
22	F	620	22	M	640
22	F	620	22	M	650
22	F	620	22	M	660
22	F	630	22	M	680
22	F	630	22	M	490
22	F	630	22	M	500
22	F	640	22	M	500
22	F	650	22	M	500
22	F	670	22	M	510
22	F	460	22	M	520
22	F	480	22	M	530
22	F	480	22	M	590
22	F	500	22	M	590
22	F	510	22	M	600
22	F	510	22	M	600
22	F	530	22	M	620
22	F	580	22	M	620
22	F	580	22	M	620
22	F	590	22	M	630
22	F	600	22	M	640
22	F	600	22	M	640
22	F	600	22	M	640
22	F	600	22	M	650
22	F	600	22	M	660
22	F	610	22	M	660
22	F	620	22	M	670
22	F	620	22	M	670
22	F	620	22	M	680

Average female length =586.4 Average male length = 581.5

Table 5 cont'd : Biological information from Sockeye samples collected at the Babine River Fence, 1989

DATE	SEX	N - F LENGTH	DATE	SEX	N - F LENGTH
July25	F	510	July 25	M	500
25	F	520	25	M	500
25	F	560	25	M	500
25	F	570	25	M	510
25	F	570	25	M	510
25	F	580	25	M	510
25	F	580	25	M	510
25	F	600	25	M	520
25	F	610	25	M	550
25	F	620	25	M	570
25	F	620	25	M	580
25	F	620	25	M	590
25	F	620	25	M	610
25	F	650	25	M	610
25	F	650	25	M	620
25	F	660	25	M	620
25	F	460	25	M	630
25	F	470	25	M	630
25	F	480	25	M	660
25	F	490	25	M	660
25	F	490	25	M	660
25	F	550	25	M	700
25	F	580	25	M	460
25	F	580	25	M	470
25	F	590	25	M	480
25	F	590	25	M	480
25	F	590	25	M	490
25	F	600	25	M	490
25	F	610	25	M	490
25	F	610	25	M	490
25	F	610	25	M	490
25	F	620	25	M	490
25	F	620	25	M	500
25	F	620	25	M	500
25	F	630	25	M	500
25	F	630	25	M	500
25	F	640	25	M	510
25	F	660	25	M	510
25	M	460	25	M	520
25	M	470	25	M	520
25	M	480	25	M	530
25	M	480	25	M	540
25	M	480	25	M	550
25	M	480	25	M	560
25	M	480	25	M	600
25	M	480	25	M	630
25	M	480	25	M	640
25	M	490	25	M	650
25	M	490	25	M	660
25	M	500	25	M	660

Average female length =585.7 Average male length = 539.1

Table 5 cont'd : Biological information from Sockeye samples collected at the Babine River Fence, 1989

DATE	SEX	N - F LENGTH	DATE	SEX	N - F LENGTH
July27	F	460	July 27	M	470
27	F	470	27	M	470
27	F	490	27	M	470
27	F	490	27	M	480
27	F	500	27	M	480
27	F	510	27	M	480
27	F	530	27	M	480
27	F	540	27	M	490
27	F	570	27	M	490
27	F	570	27	M	490
27	F	580	27	M	490
27	F	590	27	M	500
27	F	590	27	M	500
27	F	600	27	M	500
27	F	600	27	M	510
27	F	620	27	M	510
27	F	620	27	M	510
27	F	620	27	M	510
27	F	630	27	M	520
27	F	630	27	M	520
27	F	630	27	M	540
27	F	630	27	M	630
27	F	640	27	M	720
27	F	670	27	M	470
27	F	670	27	M	480
27	F	490	27	M	480
27	F	490	27	M	490
27	F	510	27	M	490
27	F	510	27	M	500
27	F	520	27	M	500
27	F	530	27	M	500
27	F	540	27	M	510
27	F	550	27	M	510
27	F	550	27	M	510
27	F	560	27	M	510
27	F	560	27	M	530
27	F	570	27	M	530
27	F	580	27	M	530
27	F	580	27	M	530
27	F	600	27	M	550
27	F	600	27	M	570
27	F	610	27	M	620
27	F	620	27	M	620
27	F	620	27	M	660
27	F	630	27	M	670
27	F	630	27	M	670
27	F	650	27	M	680
27	F	650	27	M	680
27	M	460	27	M	680
27	M	470	27	M	690

Average female length = 575 Average male length = 535.5

Table 5 cont'd : Biological information from Sockeye samples collected at the Babine River Fence, 1989

DATE	SEX	N - F LENGTH	DATE	SEX	N - F LENGTH
Aug 1	F	450	Aug 1	M	450
1	F	450	1	M	460
1	F	470	1	M	470
1	F	480	1	M	480
1	F	480	1	M	480
1	F	480	1	M	480
1	F	490	1	M	480
1	F	500	1	M	480
1	F	510	1	M	480
1	F	510	1	M	480
1	F	510	1	M	490
1	F	520	1	M	490
1	F	520	1	M	490
1	F	520	1	M	490
1	F	530	1	M	490
1	F	530	1	M	490
1	F	540	1	M	490
1	F	540	1	M	490
1	F	550	1	M	500
1	F	560	1	M	500
1	F	570	1	M	500
1	F	580	1	M	500
1	F	580	1	M	500
1	F	590	1	M	500
1	F	590	1	M	510
1	F	590	1	M	510
1	F	590	1	M	510
1	F	590	1	M	520
1	F	600	1	M	530
1	F	600	1	M	530
1	F	600	1	M	530
1	F	600	1	M	530
1	F	600	1	M	540
1	F	610	1	M	540
1	F	610	1	M	540
1	F	610	1	M	540
1	F	610	1	M	570
1	F	620	1	M	590
1	F	620	1	M	590
1	F	620	1	M	600
1	F	620	1	M	610
1	F	630	1	M	620
1	F	630	1	M	620
1	F	630	1	M	640
1	F	630	1	M	640
1	F	630	1	M	650
1	F	630	1	M	660
1	F	640	1	M	660
1	F	640	1	M	670
1	F	650	1	M	690
Average female length =		569	Average male length =		536

Table 5 cont'd : Biological information from Sockeye samples collected at the Babine River Fence, 1989

DATE	SEX	N - F LENGTH	DATE	SEX	N - F LENGTH
Aug 4	F	450	Aug 4	M	480
4	F	470	4	M	480
4	F	480	4	M	480
4	F	480	4	M	490
4	F	490	4	M	490
4	F	490	4	M	490
4	F	500	4	M	490
4	F	500	4	M	490
4	F	510	4	M	490
4	F	520	4	M	490
4	F	520	4	M	490
4	F	520	4	M	500
4	F	540	4	M	500
4	F	540	4	M	500
4	F	540	4	M	500
4	F	540	4	M	500
4	F	560	4	M	500
4	F	570	4	M	510
4	F	570	4	M	510
4	F	580	4	M	510
4	F	590	4	M	510
4	F	590	4	M	520
4	F	600	4	M	520
4	F	600	4	M	530
4	F	610	4	M	530
4	F	610	4	M	530
4	F	610	4	M	540
4	F	610	4	M	550
4	F	620	4	M	550
4	F	620	4	M	560
4	F	620	4	M	570
4	F	630	4	M	570
4	F	630	4	M	570
4	F	630	4	M	580
4	F	640	4	M	590
4	F	640	4	M	590
4	F	650	4	M	590
4	M	450	4	M	600
4	M	460	4	M	610
4	M	470	4	M	610
4	M	470	4	M	620
4	M	470	4	M	630
4	M	470	4	M	630
4	M	470	4	M	640
4	M	470	4	M	640
4	M	480	4	M	650
4	M	480	4	M	650
4	M	480	4	M	660
4	M	480	4	M	660
4	M	480	4	M	700

Average female length =564.0 Average male length = 535.2

Table 5 cont'd : Biological information from Sockeye samples collected at the Babine River Fence, 1989

DATE	SEX	N - F LENGTH	DATE	SEX	N - F LENGTH
Aug 8	F	480	Aug 8	F	620
8	F	490	8	F	620
8	F	490	8	F	630
8	F	490	8	F	630
8	F	500	8	F	640
8	F	510	8	F	640
8	F	510	8	F	640
8	F	510	8	F	640
8	F	510	8	F	660
8	F	510	8	F	660
8	F	520	8	M	470
8	F	520	8	M	470
8	F	530	8	M	480
8	F	530	8	M	480
8	F	530	8	M	480
8	F	530	8	M	480
8	F	530	8	M	480
8	F	530	8	M	490
8	F	540	8	M	490
8	F	540	8	M	490
8	F	550	8	M	500
8	F	550	8	M	500
8	F	550	8	M	500
8	F	550	8	M	510
8	F	550	8	M	510
8	F	550	8	M	510
8	F	550	8	M	510
8	F	550	8	M	520
8	F	550	8	M	520
8	F	560	8	M	520
8	F	560	8	M	520
8	F	560	8	M	540
8	F	560	8	M	540
8	F	570	8	M	550
8	F	580	8	M	550
8	F	580	8	M	560
8	F	580	8	M	560
8	F	580	8	M	570
8	F	590	8	M	580
8	F	590	8	M	580
8	F	590	8	M	600
8	F	600	8	M	600
8	F	600	8	M	630
8	F	600	8	M	640
8	F	600	8	M	660
8	F	610	8	M	660
8	F	610	8	M	670
8	F	610	8	M	670
8	F	610	8	M	680
8	F	620	8	M	680

Average female length =566.5 Average male length = 548.7

Table 5 cont'd : Biological information from Sockeye samples collected at the Babine River Fence, 1989

DATE	SEX	N - F LENGTH	DATE	SEX	N - F LENGTH
Aug 11	F	470	Aug 11	M	460
11	F	500	11	M	460
11	F	500	11	M	470
11	F	510	11	M	480
11	F	520	11	M	500
11	F	530	11	M	500
11	F	540	11	M	510
11	F	540	11	M	520
11	F	540	11	M	520
11	F	550	11	M	540
11	F	550	11	M	560
11	F	550	11	M	580
11	F	550	11	M	580
11	F	550	11	M	590
11	F	560	11	M	600
11	F	560	11	M	600
11	F	560	11	M	640
11	F	570	11	M	650
11	F	570	11	M	670
11	F	570	11	M	670
11	F	580	11	M	670
11	F	590	11	M	670
11	F	590	11	M	680
11	F	590	11	M	690
11	F	590	11	M	700
11	F	590	11		
11	F	600	11		
11	F	600	11		
11	F	600	11		
11	F	600	11		
11	F	610	11		
11	F	610	11		
11	F	620	11		
11	F	620	11		
11	F	620	11		
11	F	620	11		
11	F	620	11		
11	F	620	11		
11	F	620	11		
11	F	630	11		
11	F	640	11		
11	F	640	11		
11	F	640	11		
11	F	640	11		
11	F	650	11		
11	F	650	11		
11	F	650	11		
11	F	660	11		
11	F	660	11		
11	F	690	11		

Average female length =588.6 Average male length = 580.4

Table 5 cont'd : Biological information from Sockeye samples collected at the Babine River Fence, 1989

DATE	SEX	N - F LENGTH	DATE	SEX	N - F LENGTH
Aug 15	F	470	Aug 15	M	480
15	F	500	15	M	490
15	F	500	15	M	490
15	F	500	15	M	490
15	F	500	15	M	500
15	F	510	15	M	500
15	F	510	15	M	500
15	F	510	15	M	500
15	F	520	15	M	500
15	F	520	15	M	520
15	F	520	15	M	530
15	F	530	15	M	530
15	F	530	15	M	530
15	F	530	15	M	530
15	F	530	15	M	530
15	F	530	15	M	540
15	F	540	15	M	540
15	F	540	15	M	550
15	F	540	15	M	550
15	F	550	15	M	550
15	F	550	15	M	560
15	F	550	15	M	560
15	F	560	15	M	560
15	F	560	15	M	570
15	F	560	15	M	570
15	F	570	15	M	580
15	F	570	15	M	580
15	F	580	15	M	580
15	F	580	15	M	580
15	F	590	15	M	580
15	F	590	15	M	590
15	F	590	15	M	590
15	F	600	15	M	600
15	F	600	15	M	600
15	F	600	15	M	600
15	F	600	15	M	600
15	F	610	15	M	610
15	F	620	15	M	610
15	F	620	15	M	610
15	F	630	15	M	620
15	F	630	15	M	620
15	F	630	15	M	620
15	F	630	15	M	630
15	F	640	15	M	630
15	F	650	15	M	650
15	F	650	15	M	650
15	F	660	15	M	660
15	F	690	15	M	660
15	F	690	15	M	680
15	M	470	15	M	720

Average female length =571.0 Average male length = 570.3

Table 5 cont'd : Biological information from Sockeye samples collected at the Babine River Fence, 1989

DATE	SEX	N - F LENGTH	DATE	SEX	N - F LENGTH
Aug 19	F	470	Aug 19	F	660
19	F	510	19	F	660
19	F	510	19	M	420
19	F	510	19	M	450
19	F	520	19	M	480
19	F	520	19	M	480
19	F	520	19	M	480
19	F	530	19	M	480
19	F	530	19	M	490
19	F	530	19	M	490
19	F	530	19	M	500
19	F	540	19	M	500
19	F	540	19	M	500
19	F	540	19	M	510
19	F	540	19	M	510
19	F	540	19	M	510
19	F	540	19	M	510
19	F	540	19	M	520
19	F	540	19	M	520
19	F	550	19	M	520
19	F	550	19	M	520
19	F	550	19	M	520
19	F	550	19	M	530
19	F	560	19	M	530
19	F	560	19	M	540
19	F	570	19	M	550
19	F	570	19	M	550
19	F	580	19	M	560
19	F	580	19	M	570
19	F	580	19	M	580
19	F	590	19	M	580
19	F	590	19	M	580
19	F	590	19	M	580
19	F	600	19	M	590
19	F	600	19	M	600
19	F	600	19	M	600
19	F	610	19	M	600
19	F	610	19	M	610
19	F	610	19	M	620
19	F	610	19	M	640
19	F	620	19	M	640
19	F	620	19	M	640
19	F	620	19	M	650
19	F	620	19	M	650
19	F	620	19	M	660
19	F	630	19	M	660
19	F	630	19	M	670
19	F	630	19	M	670
19	F	630	19	M	670
19	F	650	19	M	700

Average female length =573.0 Average male length = 561.0

Table 5 cont'd : Biological information from Sockeye samples collected at the Babine River Fence, 1989

DATE	SEX	N - F LENGTH	DATE	SEX	N - F LENGTH
Aug 25	F	510	Aug 25	M	500
25	F	510	25	M	510
25	F	520	25	M	510
25	F	520	25	M	510
25	F	530	25	M	510
25	F	530	25	M	520
25	F	530	25	M	520
25	F	530	25	M	520
25	F	530	25	M	520
25	F	540	25	M	530
25	F	540	25	M	540
25	F	540	25	M	540
25	F	540	25	M	540
25	F	550	25	M	550
25	F	550	25	M	550
25	F	550	25	M	550
25	F	550	25	M	550
25	F	550	25	M	560
25	F	560	25	M	560
25	F	560	25	M	560
25	F	560	25	M	570
25	F	560	25	M	590
25	F	560	25	M	590
25	F	570	25	M	590
25	F	570	25	M	590
25	F	580	25	M	600
25	F	590	25	M	600
25	F	600	25	M	610
25	F	610	25	M	610
25	F	620	25	M	610
25	F	620	25	M	620
25	F	620	25	M	620
25	F	620	25	M	620
25	F	630	25	M	630
25	F	630	25	M	630
25	F	630	25	M	630
25	F	640	25	M	630
25	F	640	25	M	640
25	F	650	25	M	650
25	F	650	25	M	650
25	F	650	25	M	650
25	M	470	25	M	650
25	M	480	25	M	660
25	M	480	25	M	670
25	M	490	25	M	670
25	M	490	25	M	670
25	M	490	25	M	680
25	M	490	25	M	690
25	M	500	25	M	720
25	M	500	25	M	720

Average female length =574.1 Average male length = 577.9

Table 5 cont'd : Biological information from Sockeye samples collected at the Babine River Fence, 1989

DATE	SEX	N - F LENGTH	DATE	SEX	N - F LENGTH
Aug 30	F	470	Aug 30	F	620
30	F	500	30	F	620
30	F	500	30	F	620
30	F	510	30	F	620
30	F	510	30	F	620
30	F	510	30	F	620
30	F	510	30	F	630
30	F	510	30	F	630
30	F	510	30	F	630
30	F	520	30	F	630
30	F	520	30	F	630
30	F	530	30	F	630
30	F	530	30	F	630
30	F	530	30	F	640
30	F	530	30	F	640
30	F	530	30	F	640
30	F	530	30	F	640
30	F	540	30	F	640
30	F	540	30	F	640
30	F	540	30	F	650
30	F	540	30	F	650
30	F	540	30	F	650
30	F	540	30	F	650
30	F	540	30	F	660
30	F	550	30	F	660
30	F	550	30	F	670
30	F	550	30	F	670
30	F	550	30	M	450
30	F	560	30	M	460
30	F	560	30	M	470
30	F	560	30	M	480
30	F	560	30	M	490
30	F	570	30	M	500
30	F	570	30	M	550
30	F	570	30	M	580
30	F	580	30	M	590
30	F	580	30	M	600
30	F	580	30	M	640
30	F	580	30	M	640
30	F	580	30	M	640
30	F	590	30	M	640
30	F	590	30	M	640
30	F	590	30	M	640
30	F	600	30	M	650
30	F	600	30	M	650
30	F	600	30	M	660
30	F	610	30	M	660
30	F	610	30	M	690
30	F	610	30	M	710
30	F	610	30	M	720

Average female length =582.0 Average male length = 597.8

Table 6 :Biological information from Chinook samples collected at the Babine River Counting Fence, 1989.

Date	Hyp. Length	N - F. Length	Sex	Egg Retention%	Age
Sept16	760	950	F	90	6_2
16	755	1050	M		5_2
16	680	870	M		5_2
16	705	895	F	20	5_2
16	775	940	F	5	7_2
17	730	915	F	0	5_2
17	700	880	M		RG
17	750	930	M		5_2
17	700	930	M		5_2
17	720	930	F	0	5_2
17	750	950	F	10	5_2
17	315	410	M		3_2
17	700	925	M		5_2
17	475	605	F	100	3_2
18	790	1055	M		5_2
18	705	920	M		5_2
18	705	935	M		RS
18	760	950	F	80	5_2
19	630	830	M		5_2
19	720	895	F	15	6_2
19	710	940	M		5_2
19	715	905	F	95	5_2
19	600	780	M		4_2
19	615	785	M		4_2
19	630	790	F	5	RS
20	720	895	F	10	5_2
20	695	870	M		5_2
20	695	885	M		5_2
20	630	820	M		5_2
20	685	910	M		5_2
20	740	920	F	5	5_2
20	750	975	M		5_2
20	660	870	M		5_2
20	650	870	M		4_2
20	705	885	F	30	5_2
20	710	905	F	40	5_2
20	670	850	F	50	RS
21	735	950	M		5_2
21	705	895	F	50	5_2
21	805	1055	M		5_2
21	750	935	F	100	5_2
21	735	960	M		4_2
21	725	935	M		5_2
21	725	935	M		5_2
21	710	880	F	60	5_2
21	565	740	M		3_2
21	710	885	F	80	5_2
22	660	845	M		5_2
22	655	840	M		RS
22	735	955	M		5_2
22	660	840	F	0	5_2
22	725	905	F	10	5_2

Table 6 con't :Biological information from Chinook samples collected at the Babine Fence, 1989.

Date	Hyp. Length	N - F. Length	Sex	Egg Retention%	Age
Sept22	685	860	F	20	5_2
22	680	905	M		5_2
22	720	900	F	50	5_2
22	690	895	M		5_2
22	580	770	M		2_W
22	665	865	M		5_2
22	665	830	F	0	5_2
22	625	780	M		5_2
22	680	835	F	0	5_2
22	790	1020	M		6_2
22	665	850	M		5_2
23	700	880	F	50	5_2
23	650	850	M		5_2
23	660	900	M		5_2
23	750	940	F	80	6_2
23	750	960	M		6_2
23	680	850	F	50	5_2
23	830	1020	F	10	6_2
23	640	810	F	50	5_2
23	650	840	M		5_2
23	720	900	F	0	5_2
24	280	360	M		3_2
24	330	425	M		3_2
24	805	950	M		5_2
24	700	915	M		5_2
24	705	905	F	0	5_2
24	700	920	M		5_2
24	680	915	M		5_2
24	695	910	M		5_2
24	750	925	F	20	6_2
24	630	800	F	10	RS
25	700	880	F	60	5_2
25	705	900	F	0	5_2
25	685	890	M		5_2
25	750	960	F	20	5_2
25	700	880	F	0	5_2
25	810	1000	F	80	6_2
25	700	890	F	10	4_2
25	620	790	M		RS
25	630	850	M		5_2
25	720	935	M		5_2
26	760	960	F	10	5_2
26	655	850	M		5_2
26	600	790	M		RG
26	690	895	M		RS
26	790	980	F	0	5_2
26	640	830	M		RS
26	800	1040	M		5_2
26	710	890	F	40	5_2
26	690	900	M		5_2
26	675	855	F	80	5_2
27	755	965	M		5_2

Table 6 con't :Biological information from Chinook samples collected at the Babine Fence, 1989.

Date	Hyp. Length	N - F. Length	Sex	Egg Retention%	Age
Sept 27	695	850	F	95	5_2
27	695	870	F	90	5_2
27	705	880	F	90	5_2
27	685	855	F	80	RS
27	625	785	F	40	5_2
27	555	735	M		5_2
27	735	960	M		5_2
27	680	860	F	75	6_2
27	705	900	F	0	5_2
28	645	790	F	0	5_2
28	785	975	F	100	RS
28	735	905	F	100	5_2
28	730	925	F	0	5_2
28	650	820	F	95	5_2
28	710	920	M		5_2
28	730	940	M		6_2
28	715	930	M		RS
28	660	840	M		5_2
28	715	905	M		5_2
28	705	885	M		5_2
28	760	910	F	15	5_2
29	690	910	M		5_2
29	700	900	M		5_2
29	630	800	M		5_2
29	690	830	F	100	5_2
29	680	870	M		5_2
29	760	1030	M		5_2
29	660	820	M		5_2
29	710	900	M		5_2
29	720	910	M		5_2
29	300	370	M		3_2
29	720	970	M		RS
30	690	860	F	50	5_2
30	700	890	M		RS
30	740	930	F	50	5_2
30	320	400	M		3_2
30	520	680	M		4_2
30	650	860	M		5_2
30	680	870	F	0	5_2
30	400	500	M		RS
30	740	900	F	0	RS
30	645	855	M		RS
Oct 1	680	875	F	0	5_2
1	745	955	M		5_2
1	670	850	F	0	RS
1	610	795	M		5_2
1	700	875	F	0	5_2
1	635	845	M		5_2
1	715	905	F	30	5_2
1	740	945	F	50	6_2
1	730	950	M		5_2
2	730	910	F	0	5_2

Table 6 con't :Biological information from Chinook samples collected at the Babine Fence, 1989.

Date	Hyp. Length	N - F. Length	Sex	Egg Retention%	Age
Oct 2	580	730	M		5_2
2	630	810	M		5_2
2	690	870	F	0	5_2
2	540	700	M		4_2
2	710	880	F	0	5_2
2	700	880	F	0	5_2
2	680	870	M		RG
2	540	700	M		5_2
2	680	840	F	0	5_2
3	660	850	M		RS
3	680	840	F	0	5_2
3	770	970	F	0	5_2
3	750	920	F	20	5_2
3	670	850	F	0	5_2
3	690	900	M		5_2
3	670	850	M		5_2
3	690	870	F	0	5_2
3	710	900	F	5	5_2
3	710	870	F	10	5_2
4	340	440	M		RG
4	715	880	F	0	RS
4	495	625	F	0	3_2
4	685	860	F	0	5_2
4	650	795	F	0	RS
4	675	875	M		5_2
4	655	805	F	0	RG
4	555	720	M		4_2
4	735	915	F	25	6_2
4	665	860	M		5_2
5	700	910	F	0	5_2
5	710	880	F	0	5_2
5	700	910	M		5_2
5	840	1140	M		6_2
5	700	880	M		5_2
6	690	840	F	20	RG
6	690	880	F	0	5_2
6	660	820	F	0	5_2
6	650	800	F	0	5_2
6	640	820	M		RS
7	640	820	F	0	5_2
7	690	850	F	0	5_2
7	660	880	M		5_2
7	630	805	F	0	5_2
7	510	680	M		4_2
8	*710	935	M		5_2
8	*725	930	F	20	5_2
8	*680	880	M		5_2
8	*630	830	M		4_2
8	675	860	F	0	5_2
9	615	790	F	0	5_2
9	635	825	M		RS
9	420	560	M		4_2

Table 6 con't :Biological information from Chinook samples collected at the Babine Fence, 1989.

Date	Hyp. Length	N - F. Length	Sex	Egg Retention%	Age
Oct 9	805	1010	F	70	6_2
9	655	810	F	0	5_2
10	700	910	M		6_2
10	715	850	F	0	5_2
10	625	795	M		4_2
10	690	875	F	0	5_2
10	635	830	M		5_2
11	700	870	F	0	5_2
11	680	850	F	0	5_2
11	635	825	M		5_2
11	660	855	M		5_2
11	505	650	M		5_2
12	565	715	F	0	5_3
12	640	810	M		5_2
12	630	825	M		5_2
12	620	780	M		RG
12	675	855	M		6_2

Definition of abbreviations.

where * denotes a adipose clipped Chinook.
where W , RS and RG indicates a unreadable scale.

Table 7:Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	Hypural Length	N - F Length	Sex	Date	Hypural Length	N - F Length	Sex
Sept 9	415	545	M	Sept 9	440	555	M
9	410	530	M	9	410	540	M
9	405	525	M	9	380	485	M
9	390	505	M	9	425	565	M
9	410	530	M	9	380	500	F
9	425	545	M	9	395	480	F
9	400	505	M	9	400	495	F
9	380	490	M	9	415	500	F
9	405	515	M	9	415	500	F
9	415	520	M	9	380	465	F
9	390	480	M	9	385	460	F
9	400	515	M	9	395	480	F
9	360	430	M	9	405	475	F
9	405	510	M	9	385	490	F
9	430	560	M	9	355	425	F
9	400	500	M	9	400	485	F
9	405	520	M	9	380	455	F
9	405	520	M	9	415	485	F
9	375	465	M	9	415	495	F
9	400	480	M	9	370	445	F
9	385	490	M	9	370	450	F
9	395	500	M	9	390	475	F
9	400	485	M	9	405	500	F
9	410	530	M	9	405	505	F
9	425	545	M	9	390	465	F
9	365	465	M	9	390	490	F
9	440	560	M	9	390	480	F
9	405	530	M	9	390	470	F
9	425	540	M	9	375	455	F
9	400	520	M	9	370	455	F
9	415	525	M	9	385	475	F
9	405	510	M	9	375	455	F
9	375	460	M	9	385	475	F
9	400	525	M	9	385	485	F
9	400	515	M	9	385	485	F
9	390	480	M	9	380	450	F
9	395	495	M	9	390	465	F
9	445	555	M	9	395	485	F
9	400	505	M	9	390	475	F
9	395	490	M	9	395	490	F
9	340	430	M	9	355	445	F
9	395	505	M	9	385	475	F
9	410	520	M	9	405	500	F
9	385	480	M	9	370	440	F
9	375	475	M	9	400	480	F
9	395	510	M	9	385	470	F
9	385	500	M	9	390	455	F
9	340	435	M	9	400	475	F
9	400	540	M	9	400	490	F
9	365	460	M	9	385	485	F
average male =		508		average female=		475	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	Hypural Length	N - F Length	Sex	Date	Hypural Length	N - F Length	Sex
Sept10	385	500	M	Sept10	410	525	M
10	375	490	M	10	445	580	M
10	425	545	M	10	360	425	M
10	425	535	M	10	445	525	M
10	410	520	M	10	445	580	M
10	455	555	M	10	420	530	M
10	370	485	M	10	455	565	M
10	420	510	M	10	370	485	M
10	385	505	M	10	405	535	M
10	365	475	M	10	385	505	M
10	410	525	M	10	430	480	F
10	375	485	M	10	400	450	F
10	395	500	M	10	400	490	F
10	445	560	M	10	390	485	F
10	380	480	M	10	380	460	F
10	365	465	M	10	395	480	F
10	440	570	M	10	375	445	F
10	410	510	M	10	370	440	F
10	420	540	M	10	365	450	F
10	450	585	M	10	375	480	F
10	405	515	M	10	370	455	F
10	445	555	M	10	390	465	F
10	390	485	M	10	380	465	F
10	395	505	M	10	390	465	F
10	400	530	M	10	415	515	F
10	405	495	M	10	400	495	F
10	415	530	M	10	410	505	F
10	410	520	M	10	375	455	F
10	405	510	M	10	390	465	F
10	390	510	M	10	395	490	F
10	440	545	M	10	370	455	F
10	380	490	M	10	385	460	F
10	380	465	M	10	360	450	F
10	390	490	M	10	395	500	F
10	430	535	M	10	395	470	F
10	440	570	M	10	395	480	F
10	395	500	M	10	370	455	F
10	395	510	M	10	400	500	F
10	420	530	M	10	365	450	F
10	435	560	M	10	400	485	F
10	380	485	M	10	400	480	F
10	335	440	M	10	395	480	F
10	400	500	M	10	395	475	F
10	380	510	M	10	405	485	F
10	400	515	M	10	375	445	F
10	410	555	M	10	395	480	F
10	420	525	M	10	375	460	F
10	405	510	M	10	365	430	F
10	430	525	M	10	360	430	F
10	400	515	M	10	380	465	F
average male =		515		average female=		469	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	Hypural Length	N - F Length	Sex	Date	Hypural Length	N - F Length	Sex
Sept11	380	485	F	Sept11	380	490	M
11	390	475	F	11	415	540	M
11	375	440	F	11	380	480	M
11	385	475	F	11	385	485	M
11	390	480	F	11	380	475	M
11	395	495	F	11	400	510	M
11	360	450	F	11	365	465	M
11	370	450	F	11	375	475	M
11	395	480	F	11	365	465	M
11	375	465	F	11	380	495	M
11	380	475	F	11	385	500	M
11	405	490	F	11	355	460	M
11	390	460	F	11	395	525	M
11	375	465	F	11	360	465	M
11	375	450	F	11	395	495	M
11	362	450	F	11	430	545	M
11	375	450	F	11	385	485	M
11	395	475	F	11	345	440	M
11	370	455	F	11	390	420	M
11	395	485	F	11	390	510	M
11	405	490	F	11	365	465	M
11	375	465	F	11	405	510	M
11	380	465	F	11	400	510	M
11	360	435	F	11	410	540	M
11	395	460	F	11	480	625	M
11	390	480	F	11	385	505	M
11	380	455	F	11	375	485	M
11	385	470	F	11	370	475	M
11	365	450	F	11	385	485	M
11	395	480	F	11	400	510	M
11	380	480	F	11	400	510	M
11	400	485	F	11	395	490	M
11	405	485	M	11	425	555	M
11	370	470	M	11	380	485	M
11	390	490	M	11	400	510	M
11	455	585	M	11	400	510	M
11	390	490	M	11	380	500	M
11	395	505	M	11	390	500	M
11	415	540	M	11	415	530	M
11	390	500	M	11	395	525	M
11	405	545	M	11	410	545	M
11	370	475	M	11	365	475	M
11	390	500	M	11	380	475	M
11	360	460	M	11	415	520	M
11	385	485	M	11	375	485	M
11	390	500	M	11	420	550	M
11	405	510	M	11	435	575	M
11	420	555	M	11	415	530	M
11	385	525	M	11	405	525	M
11	375	470	M	11	440	575	M
average female =		468		average male =		504	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	Hypural Length	N - F Length	Sex	Date	Hypural Length	N - F Length	Sex
Sept12	420	510	F	Sept12	400	530	M
12	370	460	F	12	390	500	M
12	350	440	F	12	370	470	M
12	360	460	F	12	390	490	M
12	390	480	F	12	390	500	M
12	410	520	F	12	420	530	M
12	370	450	F	12	390	480	M
12	380	450	F	12	440	550	M
12	370	460	F	12	400	510	M
12	390	470	F	12	370	470	M
12	380	470	F	12	420	530	M
12	380	490	F	12	360	460	M
12	380	490	F	12	390	500	M
12	390	500	F	12	400	510	M
12	410	520	F	12	440	580	M
12	390	470	F	12	380	480	M
12	380	450	F	12	370	480	M
12	400	490	F	12	390	480	M
12	370	480	F	12	380	510	M
12	360	460	F	12	390	530	M
12	390	470	F	12	400	540	M
12	370	450	F	12	380	470	M
12	400	490	F	12	420	560	M
12	380	480	F	12	420	540	M
12	380	480	F	12	420	520	M
12	380	480	F	12	400	500	M
12	450	480	F	12	380	480	M
12	390	580	M	12	380	470	M
12	400	500	M	12	350	460	M
12	410	520	M	12	440	580	M
12	390	530	M	12	440	550	M
12	410	500	M	12	390	500	M
12	380	510	M	12	390	500	M
12	380	490	M	12	380	490	M
12	380	480	M	12	430	560	M
12	450	480	M	12	440	580	M
12	420	590	M	12	400	510	M
12	410	530	M	12	350	460	M
12	380	510	M	12	380	480	M
12	430	500	M	12	390	500	M
12	380	560	M	12	400	530	M
12	400	480	M	12	410	530	M
12	410	510	M	12	410	530	M
12	360	530	M	12	400	500	M
12	390	470	M	12	390	510	M
12	410	500	M	12	430	570	M
12	400	510	M	12	400	500	M
12	400	510	M	12	370	460	M
12	400	520	M	12	340	440	M
12	380	500	M	12	380	480	M
average female=		476		average male =		510	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	Hypural Length	N - F Length	Sex	Date	Hypural Length	N - F Length	Sex
Sept13	375	460	F	Sept13	390	510	M
13	400	485	F	13	335	435	M
13	375	470	F	13	430	565	M
13	375	470	F	13	420	535	M
13	375	485	F	13	375	490	M
13	395	485	F	13	360	475	M
13	390	470	F	13	360	480	M
13	355	450	F	13	365	475	M
13	420	505	F	13	405	515	M
13	360	440	F	13	375	490	M
13	365	445	F	13	395	515	M
13	390	490	F	13	415	530	M
13	430	535	F	13	370	490	M
13	370	465	F	13	355	470	M
13	365	465	F	13	355	455	M
13	380	475	F	13	370	480	M
13	390	485	F	13	435	585	M
13	375	470	F	13	400	520	M
13	410	505	F	13	390	500	M
13	365	455	F	13	370	460	M
13	360	450	F	13	405	525	M
13	370	455	F	13	440	580	M
13	385	470	F	13	445	560	M
13	390	475	F	13	430	550	M
13	385	475	F	13	410	515	M
13	375	475	F	13	385	495	M
13	310	390	F	13	435	555	M
13	380	465	F	13	410	520	M
13	370	455	F	13	395	510	M
13	355	445	F	13	405	535	M
13	390	505	M	13	425	560	M
13	410	550	M	13	380	490	M
13	440	565	M	13	365	455	M
13	410	525	M	13	385	500	M
13	365	475	M	13	440	570	M
13	380	510	M	13	380	495	M
13	435	600	M	13	405	520	M
13	430	570	M	13	420	540	M
13	405	530	M	13	370	470	M
13	375	485	M	13	385	500	M
13	350	455	M	13	380	515	M
13	410	525	M	13	390	505	M
13	390	520	M	13	395	515	M
13	410	525	M	13	380	495	M
13	405	530	M	13	440	545	M
13	395	525	M	13	430	560	M
13	390	245	M	13	420	545	M
13	375	495	M	13	430	545	M
13	430	555	M	13	420	515	M
13	440	580	M	13	410	540	M
average female=		469		average male =		514	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	Hypural Length	N - F Length	Sex	Date	Hypural Length	N - F Length	Sex
Sept14	375	475	F	Sept14	395	510	M
14	365	460	F	14	425	540	M
14	375	470	F	14	380	490	M
14	385	475	F	14	400	500	M
14	360	455	F	14	420	540	M
14	370	460	F	14	380	470	M
14	375	470	F	14	425	540	M
14	350	445	F	14	430	555	M
14	380	475	F	14	425	545	M
14	365	460	F	14	390	500	M
14	375	465	F	14	430	550	M
14	375	475	F	14	420	535	M
14	380	485	F	14	450	580	M
14	385	480	F	14	395	505	M
14	375	470	F	14	435	555	M
14	370	465	F	14	380	490	M
14	370	450	F	14	405	490	M
14	385	470	F	14	405	530	M
14	380	470	F	14	390	500	M
14	405	495	F	14	445	585	M
14	370	465	F	14	410	515	M
14	375	470	F	14	400	520	M
14	375	475	F	14	395	495	M
14	375	460	F	14	380	470	M
14	365	450	F	14	375	470	M
14	375	460	F	14	380	495	M
14	375	445	F	14	385	505	M
14	360	455	F	14	390	505	M
14	375	465	F	14	400	515	M
14	350	440	F	14	380	500	M
14	385	520	M	14	415	540	M
14	420	535	M	14	375	480	M
14	440	580	M	14	380	505	M
14	380	500	M	14	420	535	M
14	385	510	M	14	390	505	M
14	405	515	M	14	400	510	M
14	380	495	M	14	400	500	M
14	370	470	M	14	400	510	M
14	350	445	M	14	360	460	M
14	395	520	M	14	410	515	M
14	410	540	M	14	410	530	M
14	385	495	M	14	380	495	M
14	425	570	M	14	375	495	M
14	415	520	M	14	400	520	M
14	430	565	M	14	390	495	M
14	420	535	M	14	430	555	M
14	385	495	M	14	400	510	M
14	415	545	M	14	415	530	M
14	375	475	M	14	395	505	M
14	395	510	M	14	440	570	M
average female =		465		average male =		516	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	Hypural Length	N - F Length	Sex	Date	Hypural Length	N - F Length	Sex
Sept16	420	520	F	Sept16	440	580	M
16	400	480	F	16	370	480	M
16	210	390	F	16	400	540	M
16	380	450	F	16	400	530	M
16	370	450	F	16	370	480	M
16	380	450	F	16	410	550	M
16	360	440	F	16	400	500	M
16	380	450	F	16	400	520	M
16	380	460	F	16	400	510	M
16	400	480	F	16	380	490	M
16	380	460	F	16	370	470	M
16	400	490	F	16	400	520	M
16	380	470	F	16	380	480	M
16	380	470	F	16	390	500	M
16	400	470	F	16	410	530	M
16	380	470	F	16	400	530	M
16	380	470	F	16	370	490	M
16	380	470	F	16	390	490	M
16	390	480	F	16	420	550	M
16	400	490	F	16	430	550	M
16	340	430	F	16	440	550	M
16	400	460	F	16	400	500	M
16	380	480	F	16	420	530	M
16	400	480	F	16	380	500	M
16	380	470	F	16	400	520	M
16	390	490	M	16	400	520	M
16	390	490	M	16	420	540	M
16	420	540	M	16	390	520	M
16	400	520	M	16	390	480	M
16	380	500	M	16	380	520	M
16	390	480	M	16	420	560	M
16	410	510	M	16	470	600	M
16	410	530	M	16	380	480	M
16	430	560	M	16	430	550	M
16	380	480	M	16	400	530	M
16	380	500	M	16	400	500	M
16	420	540	M	16	380	490	M
16	400	520	M	16	380	490	M
16	360	480	M	16	390	500	M
16	400	490	M	16	380	490	M
16	420	520	M	16	420	520	M
16	390	520	M	16	390	530	M
16	400	540	M	16	370	480	M
16	390	500	M	16	440	560	M
16	400	510	M	16	390	500	M
16	380	480	M	16	390	480	M
16	420	560	M	16	390	490	M
16	380	500	M	16	380	490	M
16	420	570	M	16	430	550	M
16	430	550	M	16	420	520	M
average female =		465		average male =		515	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	Hypural Length	N - F Length	Sex	Date	Hypural Length	N - F Length	Sex
Sept19	385	485	F	Sept19	430	540	M
19	405	500	F	19	400	510	M
19	370	470	F	19	360	480	M
19	395	495	F	19	390	530	M
19	380	465	F	19	380	490	M
19	385	490	F	19	430	570	M
19	390	460	F	19	390	500	M
19	410	500	F	19	420	550	M
19	380	460	F	19	390	500	M
19	390	480	F	19	410	520	M
19	370	470	F	19	350	450	M
19	390	490	F	19	380	510	M
19	390	485	F	19	420	540	M
19	385	465	F	19	380	510	M
19	390	475	F	19	390	510	M
19	390	460	F	19	390	490	M
19	370	460	F	19	400	510	M
19	390	485	F	19	390	520	M
19	390	475	F	19	380	490	M
19	405	490	F	19	390	510	M
19	400	480	F	19	410	530	M
19	370	460	F	19	410	500	M
19	365	455	F	19	410	520	M
19	400	485	F	19	410	540	M
19	390	460	F	19	420	540	M
19	385	475	F	19	370	490	M
19	355	440	F	19	370	490	M
19	370	480	F	19	390	480	M
19	390	470	F	19	410	520	M
19	405	490	F	19	390	520	M
19	400	480	F	19	420	530	M
19	405	495	F	19	390	520	M
19	420	540	M	19	400	530	M
19	370	440	M	19	400	520	M
19	440	560	M	19	370	440	M
19	420	540	M	19	420	540	M
19	390	480	M	19	380	470	M
19	420	550	M	19	350	520	M
19	380	470	M	19	410	530	M
19	400	520	M	19	420	500	M
19	410	530	M	19	400	510	M
19	400	500	M	19	390	510	M
19	380	520	M	19	390	500	M
19	350	440	M	19	380	470	M
19	380	470	M	19	410	520	M
19	380	490	M	19	400	510	M
19	380	480	M	19	420	530	M
19	410	540	M	19	350	460	M
19	410	510	M	19	370	480	M
19	420	530	M	19	370	450	M
average female =		476		average male =		508	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	N - F Length	Sex	Date	N - F Length	Sex
Sept21	430	M	Sept21	520	M
21	460	M	21	520	M
21	460	M	21	520	M
21	470	M	21	520	M
21	470	M	21	530	M
21	470	M	21	530	M
21	470	M	21	530	M
21	470	M	21	530	M
21	470	M	21	530	M
21	470	M	21	540	M
21	470	M	21	550	M
21	470	M	21	550	M
21	470	M	21	550	M
21	480	M	21	560	M
21	480	M	21	440	F
21	480	M	21	450	F
21	480	M	21	450	F
21	480	M	21	450	F
21	480	M	21	450	F
21	480	M	21	460	F
21	480	M	21	460	F
21	490	M	21	460	F
21	490	M	21	460	F
21	490	M	21	460	F
21	490	M	21	460	F
21	490	M	21	460	F
21	490	M	21	460	F
21	490	M	21	460	F
21	490	M	21	460	F
21	500	M	21	470	F
21	500	M	21	470	F
21	500	M	21	470	F
21	500	M	21	470	F
21	500	M	21	470	F
21	500	M	21	470	F
21	500	M	21	470	F
21	510	M	21	480	F
21	510	M	21	480	F
21	510	M	21	490	F
21	510	M	21	490	F
21	510	M	21	490	F
21	510	M	21	490	F
21	510	M	21	490	F
21	510	M	21	500	F
21	510	M	21	510	F
21	510	M	21	510	F
21	510	M	21	510	F
21	520	M	21	530	F
21	520	M	21		
21	520	M	21		
Avg. M=	499		Avg. F=	474	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	N - F Length	Sex	Date	N - F Length	Sex
Sept23	430	M	Sept23	610	M
23	440	M	23	430	F
23	440	M	23	430	F
23	450	M	23	440	F
23	460	M	23	440	F
23	470	M	23	450	F
23	470	M	23	450	F
23	470	M	23	450	F
23	470	M	23	450	F
23	470	M	23	450	F
23	470	M	23	450	F
23	470	M	23	460	F
23	480	M	23	460	F
23	480	M	23	460	F
23	480	M	23	460	F
23	480	M	23	460	F
23	480	M	23	460	F
23	480	M	23	460	F
23	480	M	23	460	F
23	480	M	23	460	F
23	480	M	23	460	F
23	480	M	23	460	F
23	480	M	23	460	F
23	480	M	23	460	F
23	480	M	23	470	F
23	480	M	23	470	F
23	480	M	23	470	F
23	480	M	23	470	F
23	490	M	23	470	F
23	490	M	23	470	F
23	500	M	23	470	F
23	500	M	23	470	F
23	500	M	23	470	F
23	500	M	23	470	F
23	500	M	23	470	F
23	500	M	23	480	F
23	500	M	23	480	F
23	500	M	23	480	F
23	500	M	23	480	F
23	510	M	23	480	F
23	510	M	23	480	F
23	510	M	23	480	F
23	510	M	23	480	F
23	520	M	23	480	F
23	520	M	23	490	F
23	520	M	23	490	F
23	520	M	23	490	F
23	530	M	23	490	F
23	530	M	23	500	F
23	560	M	23	510	F
Avg. M=	491		Avg. F=	467	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	N - F Length	Sex	Date	N - F Length	Sex
Sept25	440	M	Sept25	460	M
25	450	M	25	470	M
25	450	M	25	470	M
25	450	M	25	470	M
25	450	M	25	470	M
25	460	M	25	470	M
25	460	M	25	480	M
25	460	M	25	480	M
25	460	M	25	480	M
25	460	M	25	480	M
25	460	M	25	480	M
25	460	M	25	490	M
25	470	M	25	490	M
25	470	M	25	490	M
25	470	M	25	490	M
25	470	M	25	490	M
25	470	M	25	490	M
25	470	M	25	490	M
25	470	M	25	490	M
25	470	M	25	490	M
25	470	M	25	490	M
25	480	M	25	500	M
25	480	M	25	500	M
25	480	M	25	500	M
25	480	M	25	500	M
25	480	M	25	500	M
25	480	M	25	500	M
25	490	M	25	500	M
25	490	M	25	500	M
25	490	M	25	500	M
25	490	M	25	500	M
25	490	M	25	510	M
25	490	M	25	510	M
25	500	M	25	510	M
25	500	M	25	510	M
25	500	M	25	520	M
25	510	M	25	520	M
25	520	M	25	520	M
25	400	F	25	520	M
25	410	F	25	520	M
25	420	F	25	520	M
25	420	F	25	520	M
25	440	F	25	530	M
25	440	F	25	530	M
25	450	F	25	530	M
25	450	F	25	540	M
25	450	F	25	550	M
25	450	F	25	550	M
25	460	F	25	550	M
25	460	F	25	560	M
Avg. M=	438		Avg. F=	491	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	N - F Length	Sex	Date	N - F Length	Sex
Sept27	420	F	Sept27	460	M
27	440	F	27	460	M
27	440	F	27	460	M
27	450	F	27	460	M
27	450	F	27	470	M
27	450	F	27	470	M
27	460	F	27	470	M
27	460	F	27	470	M
27	460	F	27	470	M
27	460	F	27	470	M
27	460	F	27	470	M
27	460	F	27	470	M
27	460	F	27	470	M
27	460	F	27	480	M
27	460	F	27	480	M
27	460	F	27	480	M
27	460	F	27	480	M
27	460	F	27	480	M
27	470	F	27	480	M
27	470	F	27	480	M
27	470	F	27	480	M
27	470	F	27	480	M
27	470	F	27	480	M
27	470	F	27	480	M
27	470	F	27	480	M
27	470	F	27	480	M
27	470	F	27	480	M
27	470	F	27	490	M
27	480	F	27	490	M
27	480	F	27	490	M
27	480	F	27	490	M
27	480	F	27	490	M
27	480	F	27	500	M
27	480	F	27	500	M
27	490	F	27	500	M
27	490	F	27	500	M
27	490	F	27	500	M
27	490	F	27	510	M
27	490	F	27	510	M
27	490	F	27	510	M
27	490	F	27	510	M
27	400	M	27	520	M
27	420	M	27	520	M
27	420	M	27	530	M
27	430	M	27	530	M
27	450	M	27	540	M
27	450	M	27	560	M
27	450	M	27	570	M
27	450	M	27	570	M
27	450	M	27	580	M
Avg. F=	468		Avg. M=	485	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	N - F Length	Sex	Date	N - F Length	Sex
Sept29	460	F	Sept29	460	M
29	460	F	29	470	M
29	460	F	29	500	M
29	500	F	29	470	M
29	490	F	29	470	M
29	470	F	29	430	M
29	480	F	29	470	M
29	470	F	29	490	M
29	470	F	29	460	M
29	470	F	29	510	M
29	460	F	29	470	M
29	490	F	29	540	M
29	470	F	29	470	M
29	490	F	29	530	M
29	470	F	29	470	M
29	460	F	29	460	M
29	470	F	29	500	M
29	470	F	29	470	M
29	480	F	29	500	M
29	470	F	29	500	M
29	460	F	29	490	M
29	450	F	29	500	M
29	460	F	29	470	M
29	470	F	29	510	M
29	480	F	29	510	M
29	440	F	29	490	M
29	480	F	29	500	M
29	460	F	29	470	M
29	440	F	29	480	M
29	460	F	29	480	M
29	470	F	29	520	M
29	440	F	29	470	M
29	470	F	29	500	M
29	450	F	29	520	M
29	460	F	29	540	M
29	460	F	29	470	M
29	450	F	29	530	M
29	440	F	29	470	M
29	450	F	29	520	M
29	480	F	29	450	M
29	460	F	29	470	M
29	450	F	29	490	M
29	450	F	29	510	M
29	460	F	29	470	M
29	470	F	29	510	M
29	480	F	29	490	M
29	490	F	29	480	M
29	460	F	29	490	M
29	460	F	29	470	M
29	470	F	29	490	M
Avg. F=	466		Avg. M=	488	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	N - F	Length	Sex	Date	N - F	Length	Sex
Oct	1	500	M	Oct	1	500	M
	1	490	M		1	440	M
	1	500	M		1	510	M
	1	520	M		1	450	M
	1	530	M		1	480	F
	1	440	M		1	440	F
	1	500	M		1	460	F
	1	470	M		1	440	F
	1	490	M		1	430	F
	1	490	M		1	480	F
	1	480	M		1	470	F
	1	520	M		1	470	F
	1	480	M		1	470	F
	1	470	M		1	430	F
	1	500	M		1	500	F
	1	490	M		1	450	F
	1	510	M		1	480	F
	1	480	M		1	440	F
	1	480	M		1	460	F
	1	430	M		1	470	F
	1	480	M		1	480	F
	1	480	M		1	440	F
	1	460	M		1	490	F
	1	490	M		1	450	F
	1	520	M		1	450	F
	1	470	M		1	450	F
	1	480	M		1	440	F
	1	510	M		1	480	F
	1	450	M		1	470	F
	1	460	M		1	470	F
	1	480	M		1	440	F
	1	470	M		1	460	F
	1	470	M		1	440	F
	1	450	M		1	450	F
	1	460	M		1	410	F
	1	540	M		1	450	F
	1	460	M		1	440	F
	1	480	M		1	450	F
	1	460	M		1	470	F
	1	490	M		1	490	F
	1	500	M		1	460	F
	1	530	M		1	450	F
	1	500	M		1	470	F
	1	510	M		1	460	F
	1	480	M		1	470	F
	1	430	M		1	460	F
	1	490	M		1	450	F
	1	480	M		1	470	F
	1	490	M		1	470	F
	1	480	M		1	480	F
Avg.	M=	484		Avg.	F=	459	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	N - F	Length	Sex	Date	N - F	Length	Sex
Oct	3	470	M	Oct	3	430	M
	3	430	M		3	490	M
	3	490	M		3	500	M
	3	450	M		3	450	M
	3	500	M		3	510	M
	3	490	M		3	510	M
	3	520	M		3	490	M
	3	480	M		3	500	M
	3	460	M		3	450	M
	3	470	M		3	490	M
	3	500	M		3	500	M
	3	470	M		3	420	M
	3	500	M		3	470	M
	3	480	M		3	480	M
	3	440	M		3	460	M
	3	460	M		3	470	M
	3	480	M		3	480	F
	3	470	M		3	460	F
	3	480	M		3	480	F
	3	500	M		3	460	F
	3	500	M		3	500	F
	3	480	M		3	470	F
	3	450	M		3	460	F
	3	450	M		3	450	F
	3	490	M		3	470	F
	3	530	M		3	480	F
	3	490	M		3	470	F
	3	580	M		3	490	F
	3	520	M		3	390	F
	3	450	M		3	440	F
	3	470	M		3	430	F
	3	490	M		3	460	F
	3	480	M		3	460	F
	3	490	M		3	460	F
	3	450	M		3	480	F
	3	450	M		3	490	F
	3	490	M		3	480	F
	3	460	M		3	450	F
	3	460	M		3	480	F
	3	500	M		3	450	F
	3	470	M		3	460	F
	3	490	M		3	470	F
	3	420	M		3	490	F
	3	480	M		3	460	F
	3	430	M		3	470	F
	3	440	M		3	450	F
	3	340	M		3	490	F
	3	450	M		3	420	F
	3	500	M		3	460	F
	3	490	M		3	440	F
Avg.	M=	475		Avg.	F=	463	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	N - F	Length	Sex	Date	N - F	Length	Sex
Oct	5	460	M	Oct	5	510	M
	5	470	M		5	490	M
	5	540	M		5	600	M
	5	470	M		5	490	M
	5	460	M		5	480	M
	5	480	M		5	480	M
	5	500	M		5	440	M
	5	430	M		5	450	M
	5	440	M		5	460	M
	5	480	M		5	490	M
	5	460	M		5	450	M
	5	430	M		5	440	M
	5	480	M		5	440	M
	5	470	M		5	450	M
	5	540	M		5	470	M
	5	430	M		5	540	M
	5	490	M		5	470	M
	5	480	M		5	480	M
	5	470	M		5	450	F
	5	490	M		5	440	F
	5	470	M		5	440	F
	5	460	M		5	440	F
	5	480	M		5	440	F
	5	460	M		5	450	F
	5	500	M		5	450	F
	5	460	M		5	440	F
	5	490	M		5	460	F
	5	440	M		5	440	F
	5	480	M		5	450	F
	5	460	M		5	450	F
	5	430	M		5	450	F
	5	490	M		5	440	F
	5	470	M		5	460	F
	5	450	M		5	430	F
	5	430	M		5	450	F
	5	460	M		5	480	F
	5	440	M		5	450	F
	5	450	M		5	460	F
	5	480	M		5	460	F
	5	400	M		5	430	F
	5	480	M		5	460	F
	5	520	M		5	480	F
	5	470	M		5	470	F
	5	470	M		5	450	F
	5	500	M		5	450	F
	5	440	M		5	460	F
	5	480	M		5	460	F
	5	460	M		5	450	F
	5	440	M		5	450	F
	5	510	M		5	480	F
Avg.	M=	472		Avg.	F=	452	

Table 7 cont'd :Biological information from Pink samples collected at the Babine River Fence, 1989.

Date	% of Males	% of Females	Average M N,F Length	Average F N,F Length
Sept 10 - 16	70	30	513	469
Sept 17 - 23	62	38	500	474
Sept 24 - 30	66	34	488	458
Oct 1 - 7	63	37	477	458
Yearly average	66	34	495	465

Consideration should be given to the fact that these are deadpitch samples.

Table 8 : Biological information from adipose clipped Coho collected at the Babine River Fence, 1989.

DATE	HYPURAL LENGTH	N - F LENGTH	SEX
Aug 29	600	730	M
Sept 2	550	690	M
5	630	740	M
7	565	720	F
9	545	695	M
9	550	680	M
10	530	670	M
10	465	590	M
10	550	670	F
10	480	615	M
10	575	755	M
12	495	625	F
13	560	730	M
13	570	740	M
13	450	565	M
14	540	665	F
19	575	720	M
19	540	680	F
19	600	760	M
19	610	730	F
20	570	690	F
21	615	680	F
22	585	730	M
22	555	680	F
22	585	720	F
22	570	700	M
22	520	640	F
22	580	685	F
22	550	670	F
23	605	740	F
23	545	680	M
23	580	745	F
23	570	700	F
23	580	685	F
23	590	710	M
24	550	660	F
24	600	720	M
24	580	690	M
24	680	760	M
25	600	715	M
25	530	630	F
26	580	685	M
26	570	670	F
26	580	685	F
26	640	740	M
26	600	740	F
27	580	695	M
27	590	700	F
27	595	700	M
29	570	705	F
29	560	695	F

Table 8 cont'd :Biological information from adipose clipped Coho collected at the Babine River Fence, 1989.

DATE	HYPURAL LENGTH	N - F LENGTH	SEX
Sept29	560	700	M
29	580	740	M
29	590	700	F
29	560	680	F
29	560	680	F
30	520	640	F
30	560	720	M
30	560	705	M
30	490	615	F
30	500	650	M
Oct 1	610	790	M
1	580	700	F
1	500	600	M
1	520	630	F
2	560	700	F
2	500	610	M
2	555	710	M
2	575	740	M
2	550	665	F
3	565	710	M
3	540	665	F
3	530	665	F
3	530	650	M
4	600	730	M
4	545	670	F
4	540	670	M
4	555	690	M
4	475	610	F
5	575	730	M
5	520	660	M
5	535	670	F
5	480	600	F
5	540	660	F
5	550	690	M
6	530	650	F
6	530	650	F
6	565	715	M
7	505	640	M
7	575	710	F
7	540	680	M
9	490	620	M
9	560	740	M
10	520	645	F
10	600	765	M
10	590	720	M
10	590	730	M
10	580	705	F
12	600	700	F
12	570	720	F